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**NEW SECTION**

**246-272A-0001 Purpose, Objectives, and Authority.**

*In (3) a reference to RCW 43.70.310 regarding Secretary and State Board of Health cooperation with the Department of Ecology has been added.*

- (1) The purpose of this chapter is to protect the public health by minimizing:
  - (a) The potential for public exposure to sewage from onsite sewage systems; and
  - (b) Adverse effects to public health that discharges from onsite sewage systems may have on ground and surface waters.
- (2) This chapter regulates the location, design, installation, operation, maintenance, and monitoring of onsite sewage systems to:
  - (a) Achieve effective long-term sewage treatment and effluent dispersal; and
  - (b) Limit the discharge of contaminants to waters of the state.
- (3) This chapter is adopted by the State Board of Health under the authority in RCW 43.20.050 to establish minimum requirements for the department of health and local boards of health, and consistent with RCW 43.70.310 integrating the objectives of public health preservation and environmental protection.

**NEW SECTION**

**246-272A- 0005 Administration.**

The local health officers and the department shall administer this chapter under the authority and requirements of chapters 70.05, 70.08, 70.118, 70.46, and 43.70 RCW. Under chapter 70.05.060(7) RCW, fees may be charged for this administration.

**246-272A- 0010 Definitions.**

- *Acronyms have been separated out into their own subsection;*
- *The following definitions have been added: Building sewer, Cover material, Disinfection, Drain rock, Greywater, Operating capacity, Ped, Rock fragment, Sewage tank, Soil scientist, Well;*
- *The following definitions have been deleted: Conventional gravity system, Conventional pressure distribution system, Drainfield, FOG(changed to O&G), Gravelless SSAS, Large onsite sewage system, Residential sewage, Table IX repair, Mineral soil;*

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- *The following definitions have been substantially amended: Design Flow, Soil dispersal component, Treatment component, Subsurface soil absorption system, Vertical separation.*

(1) Acronyms used in this chapter:

**“ANSI”** means American National Standards Institute

**“CBOD<sub>5</sub>”** means carbonaceous biochemical oxygen demand, typically measured in mg/L.

**“FC”** means fecal coliform

**“NSF”** means National Sanitation Foundation International

**“O&G” (formerly referred to as FOG)** means oil and grease, a component of sewage typically originating from food stuffs (animal fats or vegetable oils) or consisting of compounds of alcohol or glycerol with fatty acids (soaps and lotions). Typically measured in mg/L.

**“OSS”** means onsite sewage system.

**“LOSS”** means a large onsite sewage system (See chapter 246-272B WAC)

**“SSAS”** means a subsurface soil absorption system.

**“TAC”** means the technical advisory committee established in WAC 247-272A-0400.

**“TSS”** means total suspended solids, a measure of all suspended solids in a liquid, typically expressed in mg/L.

**“USEPA”** means United States Environmental Protection Agency

(2) Definitions used in this chapter:

**"Additive"** means a commercial product added to an onsite sewage system intended to affect performance or aesthetics of an onsite sewage system.

**"Approved"** means a written statement of acceptability issued by the local health officer or the department.

**“Bed”** means a soil dispersal component greater than 3 feet in width.

**“Building Sewer”** means that part of the horizontal piping of a drainage system extending from the building drain, which collects sewage from all the drainage pipes inside a building, to an onsite sewage system. It begins two (2) feet outside the building wall and conveys sewage from the building drain to the onsite sewage system.

**“Certified Inspector”** means an employee of a local health jurisdiction who holds a certificate of competency from the Washington state department of licensing under chapter 18.210 RCW or as allowed under RCW 70.118.120.

**"Cesspool"** means a pit receiving untreated sewage and allowing the liquid to seep into the surrounding soil or rock.

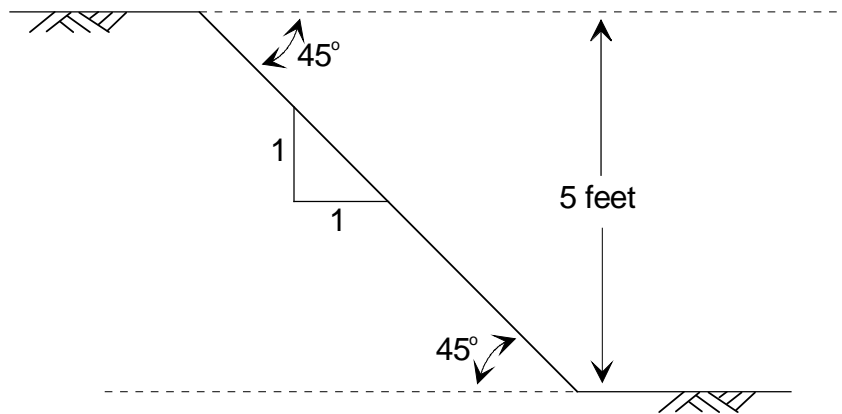
**"Conforming system"** means any onsite sewage system or component, meeting any of the following criteria:

- (a) In full compliance with new construction requirements under this chapter; or
- (b) Approved, installed and operating in accordance with requirements of previous editions of this chapter; or
- (c) Permitted through departmental concurrence by the waiver process that assure public health protection by higher treatment performance or other methods.

**“Construction Record”** means an accurate graphic and written record of the location and features of the OSS that are needed to properly monitor, operate, and maintain that system.

**“Cover Material”** means soil placed over a soil dispersal component composed predominately of mineral material with no greater than ten percent organic content. Cover material may contain a thin organic surface layer for establishing a vegetative landscape to reduce soil erosion.

**"Cuts and/or banks"** means any naturally occurring or artificially formed slope greater than one hundred percent (forty-five degrees) and extending vertically at least five feet from the toe of the slope to the top of the slope as follows:



**"Department"** means the Washington state department of health.

**"Designer"** means a person who matches site and soil characteristics with appropriate onsite sewage technology. Throughout this chapter this term applies to both onsite sewage treatment system designers licensed under chapter 18.210 RCW and professional engineers licensed under chapter 18.43 RCW.

**“Design Flow”** means the maximum volume of sewage a residence, structure, or other facility is estimated to generate in a 24-hour period. It incorporates both the operating capacity and a surge capacity for the system during periodic heavy use events. The sizing and design of the onsite sewage system is based on the design flow.

**"Development"** means the creation of a residence, structure, facility, mobile home park, subdivision, planned unit development, site, area, or similar activity resulting in the production of sewage.

**“Disinfection”** means the process of destroying pathogenic microorganisms in sewage through the application of ultraviolet light, chlorination, or ozonation.

**"Disposal component"** See Soil Dispersal Component

**“Distribution technology”** means any arrangement of equipment and/or materials that distributes sewage within an onsite sewage system.

**“Drain rock”** means clean washed gravel or crushed rock ranging in size from 3/4 inch to 2-1/2 inches, and containing no more than 1 percent by weight passing a US No. 200 sieve.

**"Effluent"** means liquid discharged from a septic tank or other onsite sewage system component.

**“Expanding clay”** means a clay soil with the mineralogy of clay particles, such as those found in the Montmorillonite/Smectite Group, which causes the clay particles to expand when they absorb water, closing the soil pores, and contract when they dry out.

**"Expansion"** means a change in a residence, facility, site, or use that:

- (a) Causes the sewage quantity or quality to exceed the existing design flow of the onsite system, for example, when a residence is increased from two to three bedrooms or a change in use from an office to a restaurant; or
- (b) Reduces the treatment or dispersal capability of the existing onsite sewage system or the reserve area, for example, when a building is placed over a reserve area.

**“Extremely gravelly”** means soil with 60% or more, but less than 90% rock fragments by volume.

**"Failure"** means a condition of an onsite sewage system or component that threatens the public health by inadequately treating sewage or by creating a potential for direct or indirect contact between sewage and the public. Examples of failure include:

- (a) Sewage on the surface of the ground;
- (b) Sewage backing up into a structure caused by slow soil absorption of septic tank effluent;
- (c) Sewage leaking from a sewage tank or collection system;
- (d) Cesspools or seepage pits where evidence of ground water or surface water quality degradation exists;
- (e) Inadequately treated effluent contaminating ground water or surface water; or,
- (f) Noncompliance with standards stipulated on the permit.

**“Fecal Coliform”** means bacteria common to the digestive systems of warm-blooded animals that are cultured in standard tests. Typically used to indicate potential contamination from sewage or to describe a level of needed disinfection. Generally measured as colonies per 100ml.

**“Gravelly”** means soils with 15% or more, but less than 35% rock fragments by volume.

**“Greywater”** means sewage from bathtubs, showers, bathroom sinks, washing machines, dishwashers, and kitchen sinks. It includes sewage from any source in a residence or structure that has not come into contact with toilet wastes.

**"Ground water"** means a subsurface water occupying the zone of saturated soil, permanently, seasonally, or as the result of the tides. Indications of ground water may include:

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- (a) Water seeping into or standing in an open excavation from the soil surrounding the excavation or monitoring ports.
- (b) Spots or blotches of different color or shades of color interspersed with a dominant color in soil, caused by reduction and oxidation of iron. These color patterns are redoximorphic features, commonly referred to as mottling. Redoximorphic features often indicate the intermittent presence of groundwater. This may be indicative of poor aeration and impeded drainage. Also see "Water table".

**"Holding tank sewage system"** means an onsite sewage system which incorporates a holding tank, the services of a sewage pumper/hauler, and the off-site treatment and disposal for the sewage generated.

**"Hydraulic loading rate"** means the amount of water applied to a given treatment step, usually expressed as gallons per square foot per day (gal/sq.ft./day).

**"Industrial wastewater"** means the water or liquid carried waste from an industrial process. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feedlots, poultry houses, or dairies. The term includes contaminated storm water and leachate from solid waste facilities.

**"Infiltrative Surface"** means that portion of the treatment or soil dispersal component at the interface between the installed material and the undisturbed native soil intended for infiltration of effluent.

**"Installer"** means a person approved by the local health officer to install or repair onsite sewage systems or components.

**"Local health officer"** means the health officer of the city, county, or city-county health department or district within the state of Washington, or a representative authorized by and under the direct supervision of the local health officer, as defined in chapter 70.05 RCW.

**"Maintenance"** means the actions necessary to keep the onsite sewage system components functioning as designed.

**"Massive structure"** means the condition of a soil layer in which the layer appears as a coherent or solid mass not separated into peds of any kind.

**"Moderate structure"** means well-formed distinct peds evident in undisturbed soil. When disturbed, soil material parts into a mixture of whole peds, broken peds, and material that is not in peds.

**"Monitoring"** means a regular periodic or continuous check of an onsite sewage system, which is performed by observations and measurements, to determine if the system is functioning as intended and if system maintenance is needed. Monitoring also includes maintaining accurate records that document monitoring activities.

**"Onsite sewage system" (OSS)** means a sewage treatment system, located on or nearby the property it serves, consisting of a collection system, treatment component or treatment sequence and a soil dispersal

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component. An onsite sewage system also refers to a holding tank sewage system or other system that does not have a soil dispersal component.

**“Operating Capacity”** means the maximum on-going average daily volume of sewage an OSS can accommodate on a sustained basis. It is less than the design flow.

**"Ordinary high-water mark"** means the mark on lakes, streams, springs, and tidal waters, found by examining the beds and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland with respect to vegetation, as that condition exists on the effective date of this chapter, or as it may naturally change thereafter. The following definitions apply where the ordinary high water mark cannot be found:

- (a) The ordinary high-water mark adjoining marine water is the elevation at mean higher high tide; and
- (b) The ordinary high-water mark adjoining freshwater is the line of mean high water.

**“Ped”** means a unit of soil structure such as blocks, column, granule, plate or prism formed by natural processes.

**"Person"** means any individual, corporation, company, association, society, firm, partnership, joint stock company, or any governmental agency, or the authorized agents of any such entities.

**"Planned unit development”** means a development characterized by a unified site design, clustered residential units and/or commercial units, and areas of common open space.

**“Platy structure”** means soil that contains flat peds that lie horizontally and often overlap. This type of structure will impede the vertical movement of water.

**"Pressure distribution"** means a system of small diameter pipes equally distributing effluent throughout a trench or bed, as described in the "Recommended Standards and Guidance for Pressure Distribution Systems" by the department.

**“Professional Engineer”** means a person who is currently licensed as an engineer under the provisions of chapter 18.43RCW.

**"Proprietary product "** means sewage treatment and distribution technologies, methods, and materials subject to a patent or trademark.

**“Public domain technology”** means sewage treatment and distribution technologies, methods, and materials not subject to a patent or trademark.

**"Public sewer system"** means a sewerage system:

- (a) Owned or operated by a city, town, municipal corporation, county, or other approved ownership consisting of a collection system and necessary trunks, pumping facilities and a means of final treatment and disposal; and
- (b) Approved by or under permit from the department of ecology, the department of health and/or a local health officer.

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**"Pumper"** Means a person approved by the local health officer to remove and transport sewage or septage from onsite sewage systems.

**"Repair"** means restoration, excluding maintenance, by relocation, replacement or reconstruction of a failed onsite sewage system.

**"Reserve area"** means an area of land approved for the installation of a conforming system and dedicated for replacement of the OSS upon its failure.

**"Restrictive layer"** means a stratum impeding the vertical movement of water, air, and growth of plant roots, such as hardpan, claypan, fragipan, caliche, some compacted soils, bedrock and unstructured clay soils.

**"Rock fragment"** means rock or mineral fragments having a diameter of 2 millimeters or more; for example, gravel, cobbles, stones, and boulders.

**"Seepage pit"** means an excavation more than three feet deep where the sidewall of the excavation is designed to dispose of septic tank effluent. Seepage pits may also be called "dry wells".

**"Septage"** means the mixture of solid wastes, scum, sludge, and liquids pumped from within septic tanks, pump chambers, holding tanks, and other OSS components.

**"Septic tank"** means a watertight treatment receptacle receiving the discharge of sewage from a building sewer or sewers, designed and constructed to permit separation of settleable and floating solids from the liquid, detention and anaerobic digestion of the organic matter, prior to discharge of the liquid.

**"Sewage"** means any urine, feces, and the water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments or other places.

**"Sewage quality"** means contents in sewage that include:

- (a) CBOD<sub>5</sub>, TSS, and O&G;
- (b) Other parameters that can adversely affect treatment. Examples include pH, temperature, and dissolved oxygen;
- (c) Other constituents that create concerns due to specific site sensitivity. Examples include fecal coliform and nitrogen.

**"Sewage tank"** means a prefabricated or cast-in-place septic tank, pump tank/dosing chamber, holding tank, grease interceptor, recirculating filter tank or any other tanks as they relate to onsite sewage systems including tanks for use with proprietary products.

**"Soil dispersal component"** means a technology that releases effluent from a treatment component into the soil for dispersal, final treatment and recycling.

**"Soil log"** means a detailed description of soil characteristics providing information on the soil's capacity to act as an acceptable treatment and dispersal medium for sewage.



**“Soil scientist”** means a person certified by the American Society of Agronomy as a certified professional soil scientist.

**"Soil type"** means one of seven numerical classifications of fine earth particles and rock fragments as described in WAC 246-272A-0220(2)(e).

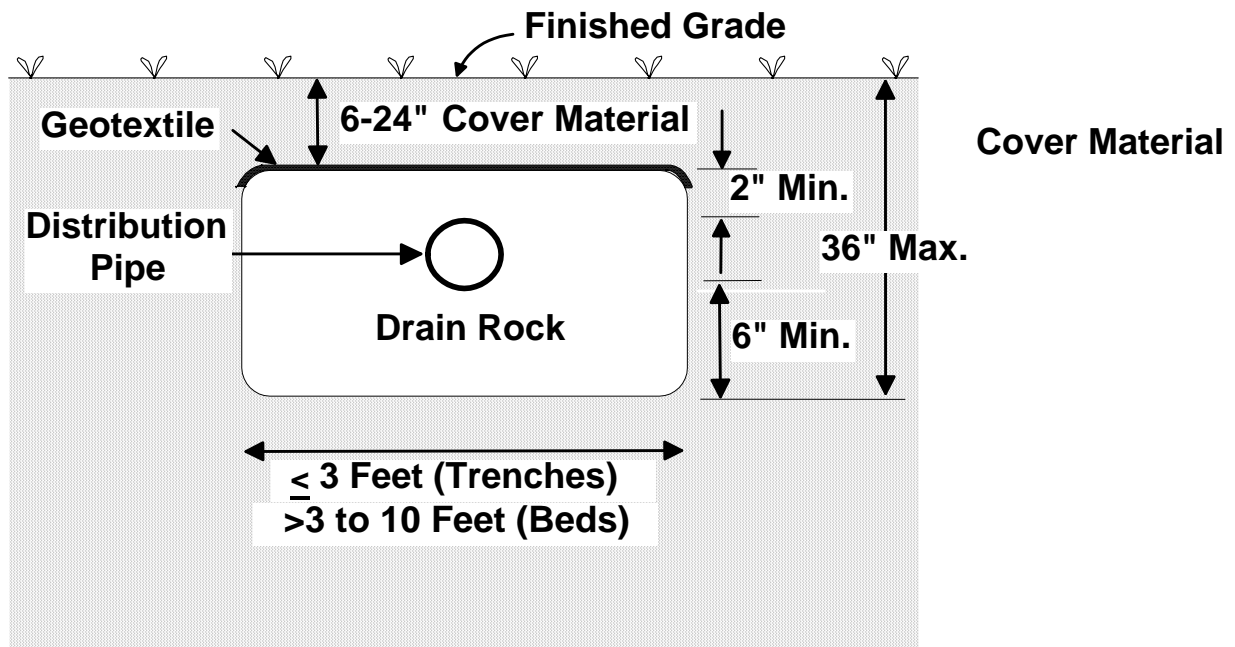
**“Standard methods”** means the 20<sup>th</sup> Edition of Standard Methods for the Examination of Water and Wastewater, prepared and published jointly by the American Public Health Association, the American Water Works Association and the Water Environment Federation.

**“Strong structure”** means peds are distinct in undisturbed soil. They separate cleanly when soil is disturbed, and the soil material separates mainly into whole peds when removed.

**"Subdivision"** means a division of land or creation of lots or parcels, described under chapter 58.17 RCW, now or as hereafter amended, including both long and short subdivisions, planned unit developments, and mobile home parks.

**"Subsurface soil absorption system" (SSAS)** means a soil dispersal component of trenches or beds containing either a distribution pipe within a layer of drain rock covered with a geotextile, or an approved gravelless distribution technology designed and installed in original, undisturbed, unsaturated soil providing at least minimal vertical separation as established in this chapter, with either gravity or pressure distribution of the treatment component effluent.

## SSAS



**"Surface water"** means any body of water, whether fresh or marine, flowing or contained in natural or artificial unlined depressions for significant periods of the year, including natural and artificial lakes, ponds, springs, rivers, streams, swamps, marshes, irrigation canals and tidal waters.

**"Timed dosing"** means delivery of predetermined volumes of sewage uniformly released after prescribed resting intervals so that the component downstream from the pump receives no more than the operating capacity.

**"Treatment Component"** means a technology that treats sewage in preparation for further treatment and/or dispersal into the soil environment. Some treatment components, such as a mound, incorporate a soil dispersal component in lieu of separate treatment and soil dispersal components.

**"Treatment Level"** means one of 6 levels (A, B, C, D, E, & N) used in these rules to:

1. Identify treatment component performance demonstrated through requirements specified in 246-272A-0110; and
2. Match site conditions of vertical separation and soil type with Treatment Components.

Treatment Levels used in these rules are not intended to be applied as field compliance standards. Their intended use is for establishing treatment product performance in a product testing setting under established protocols by qualified testing entities.

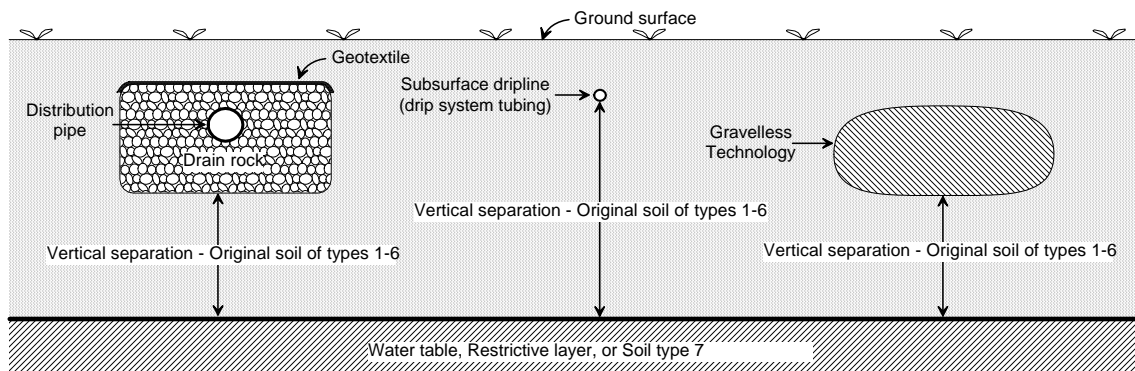
**"Treatment sequence"** means any series of treatment components that discharges treated sewage to the soil dispersal component.

**"Trench"** means a soil dispersal component consisting of an excavation with a width of three feet or less.

**"Unit volume of sewage"** means:

- (a) A single family residence;
- (b) A mobile home site in a mobile home park; or
- (c) 450 gallons of sewage per day where the proposed development is not single family residences or a mobile home park.

**"Vertical separation"** means the depth of unsaturated, original, undisturbed soil of Soil Types 1-6 between the bottom infiltrative surface of a soil dispersal component and the highest seasonal water table, a restrictive layer, or Soil Type 7 as illustrated below by the profile drawing of a subsurface soil absorption system:



**"Very gravelly"** means soil containing 35% or more, but less than 60% rock fragments by volume.

"**Water table**" means the upper surface of the ground water, whether permanent or seasonal. Also see "ground water."

"**Well**" means any excavation that is constructed when the intended use of the well is for the location, diversion, artificial recharge, observation, monitoring, dewatering or withdrawal of ground water for agricultural, municipal, industrial, domestic, or commercial use. Excluded are interceptor or curtain drains constructed to lower water tables.

## **246-272A-0015 Local Management and Regulation.**

- *Modified (1)(b)(ii)*
- *Added new (1)(b)(ii)(I) areas where nitrogen has been identified as a contaminant of concern*
- *Added new (1)(b)(v) requiring local health officers to describe how the local jurisdiction will adequately fund the local OSS program.*
- *Added new (1)(b)(vi) requiring local health officers to describe how they will remind and encourage homeowners to comply with inspections*
- *Modified (2) to require local implementation*
- *Added new (3) establishing a due date for marine county plans and department review of these plans*
- *(4) local health officers "shall" require homeowners to comply with installation and operational permits if specified in the local plan*
- *(6) Establishes due date for departmental guidance for plan development*
- *Added new (14) local health discretion for non-potable reuse of greywater*

(1) The local health officer shall develop a written plan that will provide guidance to the local health jurisdiction regarding development and management activities for all OSS within the jurisdiction. The plan shall include:

- a. A statement of the goals, objectives and desired outcomes; and
- b. A set of actions along with a proposed implementation timetable that will:
  - i. Progressively develop and maintain an inventory of all known OSS in operation within the jurisdiction;
  - ii. Identify any areas where OSS could pose an increased public health risk.

The following areas shall be given priority in this activity:

    - (A) Shellfish protection districts or shellfish growing areas;
    - (B) Sole Source Aquifers designated by the U.S. Environmental Protection Agency;
    - (C) Areas in which aquifers used for potable water as designated under Washington Growth Management Act, chapter 36.70A.170 RCW are critically impacted by recharge;
    - (D) Designated wellhead protection areas for Group A public water systems;
    - (E) Up-gradient areas directly influencing water recreation facilities designated for swimming in natural waters with artificial boundaries within the waters as described by the Water Recreation Facilities Act, chapter 70.90 RCW;

- (F) Areas designated by the department of ecology as special protection areas under chapter 173-200-090 WAC, Water Quality Standards for Ground Waters of the State of Washington;
  - (G) Wetland areas under production of crops for human consumption;
  - (H) Frequently flooded areas including areas delineated by the Federal Emergency Management Agency;
  - (I) Areas where nitrogen has been identified as a contaminant of concern; and
  - (J) Other areas designated by the local health officer.
- (iii) Identify the additional requirements for operation, maintenance and monitoring that are commensurate with risks posed by OSS within the geographic areas identified in subsection (ii) of this section; and
  - (iv) Describe the capacity of the local jurisdiction to assure adequate operation, monitoring and maintenance of all known onsite sewage systems including the ability to:
    - (A) Facilitate education and provide operation and maintenance information for all types of systems in use within the jurisdiction; and
    - (B) Maintain records of all operation and maintenance activities as identified.
    - (C) Enforce OSS owner permit application, operation, monitoring and maintenance and failure repair requirements defined in WAC 246-272A-0200(1), 246-272A-0270, 246-272A-0275, and 246-272A-0280 (1) and (2).
  - (v) Describe the capacity of the local health jurisdiction to adequately fund the local OSS plan.
  - (vi) Describe how the local health officer will remind and encourage homeowners to complete the operation and maintenance inspections required by 246-272A-0270 and the long term plan for how the local health officer will confirm these inspections have occurred.
- (2) After being approved by the local board of health following a public hearing, the local health officer shall:
    - a. Supply a copy of the plan to the department; and,
    - b. Implement the plan described in subsection (1).
  - (3) The plans of all local health jurisdictions bordering the Pacific Ocean or Puget Sound shall be submitted to the department by *(insert a date 2 years and 2 months after adoption)* and shall be reviewed to ensure the elements described in subsection (1) have been addressed.
    - (a) The department shall provide in writing to the local board of health its review of the completeness of the plan.
    - (b) For purposes of this section the local health jurisdictions bordering the Pacific Ocean or Puget Sound are Clallam, Grays Harbor, Island, Kitsap, Jefferson, Mason, Pacific, San Juan, Seattle-King, Skagit, Snohomish, Tacoma-Pierce, Thurston and Whatcom.
  - (4) In order to implement the plan described in subsection (1), the local health officer shall require the owner of the OSS to:

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- (a) Comply with additional requirements for the location, design, or performance specified on the installation permit; and
  - (b) Comply with the conditions of the operational permit if one is required.
- (5) In order to implement the plan described in subsection (1), the local health officer may require the owner of the OSS to:
  - (a) Ensure additional maintenance and monitoring of the OSS;
  - (b) Provide dedicated easements for inspections, maintenance, and potential future expansion of the OSS;
  - (c) Place a notice to title identifying any additional requirements for OSS operation, maintenance and monitoring; and
  - (d) Have an inspection of the OSS at the time of property transfer including the preparation of a "construction record" if necessary.
- (6) No later than (*insert date 1 year after adoption*), the department shall develop guidance on local management programs to assist local health jurisdictions in plan development. This guidance shall include specific recommendations for marine shoreline protection.
- (7) Local boards of health may adopt and enforce local rules and regulations governing onsite sewage systems when the local regulations are:
  - (a) Consistent with, and at least as stringent as, this chapter; and
  - (b) Approved by the department prior to the effective date of local regulations
- (8) A local board of health shall apply for departmental approval of local regulations by initiating the following procedure:
  - (a) The local board shall submit the proposed local regulations to the department.
  - (b) Within 90 days of receipt, the department shall:
    - (i) Approve the regulation in writing; or
    - (ii) Signify automatic tacit approval with the local regulations and permitting local implementation by failing to act; or
    - (iii) Deny approval of the regulations. If the department determines local regulations are not consistent with this chapter, the department shall provide specific reasons for denial.
- (9) Upon receipt of departmental approval or after 90 days without notification, whichever comes first, the local board may implement adopted regulations. The local board shall provide a copy of the adopted local regulations to the department.
- (10) If the department denies approval of local regulations, the local board of health may:
  - (a) Resubmit revised regulations for departmental consideration; or
  - (b) Submit a written request for a review of the departmental denial within 120 days from the date the local board of health receives the written reasons for the denial.
- (11) Upon receipt of written request for review of the departmental denial, the department shall:
  - (a) Acknowledge the receipt of the request in writing; and
  - (b) Form a mutually acceptable advisory panel consisting of:

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- (i) One departmental employee;
- (ii) One employee from a local health jurisdiction other than that which requested the review; and
- (iii) One member of the technical advisory committee. .

(12) If good faith efforts to reach agreement are unsuccessful, the local board of health may appeal the denial to the Washington State Board of Health for resolution.

(13) Nothing in this chapter shall prohibit the adoption and enforcement of more stringent regulations by local health departments.

(14) In the plan required in subsection (1) of this section and in local regulations, the local health officer may address water conservation and include options for the non-potable reuse of greywater. Any treatment and dispersal of greywater outside the residence or structure must comply with this chapter.

**246-272A-0020 Applicability.**

- *(1) has been amended to remove the Department and clarify that local health officers apply this chapter for OSS up to 3,500 gallons per day.*
- *A new (2) has been added to say that the Department applies this chapter for the registration of proprietary products.*
- *The old (2) has been deleted to remove any perceived inconsistency with land use statutes.*
- *(4), (5), (6) and have been removed because the chapter now only applies to OSS up to 3,500 gallons per day making these explanatory sections unnecessary. (7) was deleted because Chapter 90.48 RCW applies whether or not it is stated in these rules.*

(1) The local health officer:

- (a) Shall apply this chapter to OSS treating sewage and dispersing effluent from residential sources with design flows up to 3,500 gallons per day;
- (b) May apply this chapter to OSS for non-residential sources of sewage if treatment, siting, design, installation, and operation and maintenance measures provide treatment and effluent dispersal equal to that required of residential sources.
- (c) May not apply this chapter to industrial wastewater.

(2) The department applies this chapter for the registration of proprietary treatment and distribution products.

(3) A valid sewage system design approval, or installation permit issued prior to the effective date of these regulations:

- (a) Shall be acted upon in accordance with regulations in force at the time of issuance;
- (b) Shall have a maximum validity period of five years from the date of issuance or remain valid for an additional year beyond the effective date of these regulations, whichever assures the most lenient expiration date; and
- (c) May be modified to include additional requirements if the health officer determines that a serious threat to public health exists.

## **NEW SECTION**

### **246-272A-0025 Connection to Public Sewer System.**

- (1) When adequate public sewer services are available within two hundred feet of the residence or facility, the local health officer, upon the failure of an existing onsite sewage system may:
  - (a) Require hook-up to a public sewer system; or
  - (b) Permit the repair or replacement of the onsite sewage system only if a conforming system can be designed and installed.
- (2) Except as noted in subsection (1) of this section, the owner of a failure shall abandon the OSS under WAC 246-272A-0300 and connect the residence or other facility to a public sewer system when:
  - (a) The distance between the residence or other facility and an adequate public sewer is two hundred feet or less as measured along the usual or most feasible route of access; and
  - (b) The sewer utility allows the sewer connection.
- (3) The owner of a residence or other facility served by a system meeting the requirements of Table IX of this chapter shall abandon the OSS according to the requirements specified in WAC 246-272A-0300, and connect the residence or other facility to a public sewer system when:
  - (a) Connection is deemed necessary to protect public health by the local health officer;
  - (b) An adequate public sewer becomes available within two hundred feet of the residence or other facility as measured along the usual or most economically feasible route of access; and
  - (c) The sewer utility allows the sewer connection.
- (4) Local boards of health may require a new development to connect to a public sewer system to protect public health.

## **NEW SECTION**

### **246-272A-0100 Sewage Technologies**

*A new (2) has been added to this section to incorporate the information that was in –0110 Public Domain Treatment Technologies and –0130 Public Domain Distribution Technologies.*

- (1) The department may develop Recommended Standards and Guidance to assist local health officers in permitting different types of sewage treatment and distribution technologies including the following four broad categories:
  - (a) Public domain treatment technologies (e.g. sand filters);
  - (b) Proprietary treatment products (e.g. aerobic treatment systems and packed bed filters);
  - (c) Public domain distribution technologies (e.g. gravel or generic gravel substitutes, gravity and pressure distribution methods and materials);
  - (d) Proprietary distribution products (e.g. sub-surface drip products or gravelless distribution products).

- (2) All types of sewage technologies must have either standards for use described in this chapter or departmental Recommended Standards and Guidance before the local health officer may permit them. Recommended Standards and Guidance may include information and detail such as:
- (a) Application;
  - (b) Design;
  - (c) Installation;
  - (d) Operation, monitoring and maintenance;
  - (e) Performance Expectations; and,
  - (f) Sources of information.

### **NEW SECTION 246-272A-0110 Proprietary Treatment Products – Certification and Registration**

*The former –0110 has been deleted and incorporated into 0100 above. This section is now what was – 0120.*

- *(1) has been moved to –0200(4)(b) and replaced with a new (1) giving direction to manufacturers to register products*
  - *Deleted existing 2(d) replaced with clarification that bacteriological reduction verification is needed for Levels A, B, & C.*
  - *(3) has been relocated to -0130(1)*
  - *In Tables I, II, & III, combined categories 2&3, redefined categories 1 & 2*
  - *In Table II, clarified the reporting requirements for test results for Category 2*
  - *In Table III, Treatment Level E CBOD<sub>5</sub> requirement modified to be more stringent based on TRC recommendations.*
  - *In Table III for Category 2, gone from 30 day average to full test average*
- (1) Manufacturers shall register their proprietary treatment products with the department in order to be eligible to be permitted by local health officers.
- (2) To qualify for product registration, manufacturers desiring to sell or distribute proprietary treatment products in Washington state shall:
- (a) Verify product performance through testing using the testing protocol established in Table I and register their product with the department using the process described in WAC 246-272-0120;
  - (b) Report test results of influent and effluent sampling obtained throughout the testing period (including normal and stress loading phases) for evaluation of constituent reduction according to Table II;
  - (c) Demonstrate product performance according to Table III. All 30-day averages and geometric means obtained throughout the test period must meet the identified threshold values to qualify for registration at that threshold level; and
  - (d) For registration at levels A, B, & C verify bacteriological reduction according to 246-272A-0130.
- (3) Manufacturers verifying product performance through testing according to the following standards or protocols shall have product testing conducted by a testing facility accredited by ANSI:
- (a) ANSI/NSF Standard 40 — Residential Wastewater Treatment Systems;
  - (b) NSF Standard 41: Non-Liquid Saturated Treatment Systems; or,



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- (c) NSF Protocol P157 Electrical Incinerating Toilets - Health and Sanitation.
- (4) Manufacturers verifying product performance through testing according to the following standards or protocols shall have product testing conducted by a testing facility meeting the requirements established by the Testing Organization and Verification Organization, consistent with the test protocol and plan:
- (a) EPA/NSF — Protocol for the Verification of Wastewater Treatment Technologies; or,
  - (b) EPA Environmental Technology Verification Program protocol for the Verification of Residential Wastewater Treatment Technologies for Nutrient Reduction.

**TABLE I**

<b>Testing Requirements for Proprietary Treatment Products</b>	
<b>Treatment Component / Sequence Category</b>	<b>Required Testing Protocol</b>
<b>Category 1</b> Designed to treat sewage with strength typical of a residential source when septic tank effluent is anticipated to be equal to or less than: <ul style="list-style-type: none"> <li>(1) Treatment Level E, and</li> <li>(2) 200 mg/l CBOD<sub>5</sub>, 125 mg/l TSS, and 30 mg/l O&amp;G for any individual test result.</li> </ul>	ANSI/NSF 40 — Residential Wastewater Treatment Systems (protocols dated between July 1996 and the effective date of these rules)
<b>Category 2</b> Designed to treat high-strength sewage from any source when septic tank effluent is anticipated to be greater than: <ul style="list-style-type: none"> <li>1) Treatment Level E; and</li> <li>2) 200 mg/l CBOD<sub>5</sub>, 125 mg/l TSS, and 30 mg/l O&amp;G for any individual test result.</li> </ul> (Such as at restaurants, grocery stores, mini-marts, group homes, medical clinics, residences, etc.)	EPA/NSF Protocol for the Verification of Wastewater Treatment Technologies / EPA Environmental Technology Verification (April 2001)
<b>Category 3</b> Blackwater component of residential sewage (such as composting and incinerating toilets).	NSF/ANSI Standard 41: Non-Liquid Saturated Treatment Systems (September 1999)  NSF Protocol P157 Electrical Incinerating Toilets - Health and Sanitation (April 2000)
<b>Total Nitrogen Reduction in Categories 1 &amp; 2 (Above)</b>	Protocol for the Verification of Residential Wastewater Treatment Technologies for Nutrient Reduction / EPA Environmental Technology Verification Program (November, 2000)

**TABLE II**

<b>Test Results Reporting Requirements for Proprietary Treatment Products</b>	
<b>Treatment Component /Sequence Category</b>	<b>Testing Results Reported</b>
<p><b>Category 1</b> Designed to treat sewage with strength typical of a residential source when septic tank effluent is anticipated to be equal to or less than:</p> <ul style="list-style-type: none"> <li>(1) Treatment Level E; and</li> <li>(2) 200 mg/l CBOD<sub>5</sub>, 125 mg/l TSS, and 30 mg/l O&amp;G for any individual test result.</li> </ul>	<p>Report test results of influent and effluent sampling obtained throughout the testing period for evaluation of constituent reduction for the parameters: CBOD<sub>5</sub>, and TSS:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Average</li> <li><input type="checkbox"/> Minimum</li> <li><input type="checkbox"/> Median</li> <li><input type="checkbox"/> 30-day Average (for each month)</li> <li><input type="checkbox"/> Standard Deviation</li> <li><input type="checkbox"/> Maximum</li> <li><input type="checkbox"/> Interquartile Range</li> </ul> <p>For bacteriological reduction performance, report fecal coliform test results of influent and effluent sampling by geometric mean from samples drawn within 30 day or monthly calendar periods, obtained from a minimum of three samples per week throughout the testing period. See WAC 246-272A-0130.</p> <p>Test report must also include the individual results of all samples drawn throughout the test period.</p>
<p><b>Category 2</b> Designed to treat high-strength sewage from any source when septic tank effluent is anticipated to be greater than:</p> <ul style="list-style-type: none"> <li>1) Treatment Level E; and</li> <li>2) 200 mg/l CBOD<sub>5</sub>, 125 mg/l TSS, and 30 mg/l O&amp;G for any individual test result.</li> </ul> <p>(Such as at restaurants, grocery stores, mini-marts, group homes, medical clinics, residences, etc.)</p>	<p>Report all individual test results and full test average values of influent and effluent sampling obtained throughout the testing period for: CBOD<sub>5</sub>, TSS and O&amp;G. Establish the treatment capacity of the product tested in pounds per day for CBOD<sub>5</sub>.</p>
<p><b>Category 3</b> Blackwater component of residential sewage (such as composting and incinerating toilets).</p>	<p>Report test results according to the format prescribed in the NSF test protocol, reporting on all performance criteria required by the protocol.</p>
<p><b>Total Nitrogen Reduction in Categories 1 &amp;2 (Above)</b></p>	<p>Report test results according to the format prescribed in the test protocol, reporting on all performance criteria required by the protocol.</p>

**TABLE III**

Product Performance Requirements for Proprietary Treatment Products						
Treatment Component / Sequence Category	Product Performance Requirements					
<b>Category 1</b> Designed to treat sewage with strength typical of a residential source when septic tank effluent is anticipated to be equal to or less than: (1) Treatment Level E, and (2) 200 mg/l CBOD <sub>5</sub> , 125 mg/l TSS, and 30 mg/l O&G for any individual test result.	<b>Treatment System Performance Testing Levels</b>					
	Level	Parameters				
		CBOD <sub>5</sub>	TSS	O&G	FC	TN
	<b>A</b>	10 mg/l	10 mg/l	—	200 / 100 ml	—
	<b>B</b>	15 mg/l	15 mg/l	—	1,000 / 100 ml	—
	<b>C</b>	25 mg/l	30 mg/l	—	50,000 / 100 ml	—
	<b>D</b>	25 mg/l	30 mg/l	--	--	--
	<b>E</b>	125 mg/l	80 mg/l	20 mg/l	—	—
	<b>N</b>	—	—	—	—	20 mg/l
	Values for Levels A — D are 30-day values (averages for CBOD <sub>5</sub> , TSS, and geometric mean for FC.) All 30-day averages throughout the test period must meet these values in order to be registered at these levels. Values for Levels E and N are derived from full test averages.					
<b>Category 2</b> Designed to treat high-strength sewage from any source when septic tank effluent is anticipated to be greater than: (1) Treatment Level E; and (2) 200 mg/l CBOD <sub>5</sub> , 125 mg/l TSS, and 30 mg/l O&G for any individual test result. (Such as at restaurants, grocery stores, mini-marts, group homes, medical clinics, residences, etc.)	All of the following requirements must be met:  (1) All full test averages must meet Level E; and (2) All individual test results must establish product performance effluent quality equal to or less than 200 mg/l CBOD <sub>5</sub> , 125 mg/l TSS, and 30 mg/l O&G; and, (3) Establish the treatment capacity of the product tested in pounds per day for CBOD <sub>5</sub> .					
<b>Category 3</b> Blackwater component of residential sewage (such as composting and incinerating toilets).	Test results must meet the performance requirements established in the NSF test protocol.					
<b>Total Nitrogen Reduction in Categories 1 &amp; 2 (Above)</b>	Test results must establish product performance effluent quality meeting Level N, above when presented as the full test average					

## NEW SECTION

### 246-272A-0120 Proprietary Treatment Product Registration – Process and Requirements

- *Formerly section –0125.*
  - *New subsection (3) to require manufacturers to make readily available product information to all interested parties*
  - *Former (6) has been moved to the new –0125 dealing with transition of products from the Approved list to the Registered list;*
  - *New (6) deals with product concerns from field assessments and their impact on registration renewal;*
- (1) Manufacturers shall register their proprietary treatment product(s) by submitting a complete application in the format provided by the department, including:
- (a) Manufacturer name, mailing address, street address and phone number;
  - (b) Contact individual name, mailing address, street address, and phone number. The contact individual must be vested with the authority to represent the manufacturer in this capacity;
  - (c) Name, including specific brand and model, of the proprietary treatment product;
  - (d) A description of the function of the proprietary treatment product along with any known or projected limitation on the use of the product;
  - (e) Product description and technical information, including process flow drawings & schematics; materials & characteristics; component design specifications; design capacity, volumes and flow assumptions & calculations; components; dimensioned drawings & photos;
  - (f) For treatment systems in Category 2, daily capacity of the model or models in pounds per day of CBOD<sub>5</sub>.
  - (g) Siting & installation requirements;
  - (h) Detailed description, procedure and schedule of routine service and system maintenance events;
  - (i) Identification of information subject to protection from disclosure for trade secrets;
  - (j) Copies of product brochures & manuals: Sales & Promotional; Design; Installation; Operation & Maintenance; and Homeowner Instructions;
  - (k) The most recently available product test protocol and results report;
  - (l) A signed and dated certification by the manufacturer's agent specifically including the following statement, "I certify that I represent (INSERT MANUFACTURING

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COMPANY NAME) and I am authorized to prepare or direct the preparation of this application for registration. I attest, under penalty of law, that this document and all attachments are true, accurate, and complete. I understand and accept that the product testing results reported with this application for registration are the parameters and values to be used for determining conformance with Treatment System Performance Testing Levels established in chapter 246-272A WAC;”

- (m) A signed and dated certification from the testing entity including the statement, “I certify that I represent (INSERT TESTING ENTITY NAME), that I am authorized to report the testing results for this proprietary treatment product. I attest, under penalty of law, that the report about the test protocol and results is true, accurate, and complete;” and,
  - (n) The fee described in WAC 246-272A-990.
- (2) Products within a single series or model line (sharing distinct similarities in design, materials, capacities) may be registered under a single application, consistent with the provisions of their test protocol for the certification of other products within a product series. Products outside of the series or model line must be registered under separate applications.
  - (3) Manufacturers shall have readily accessible information for designers, homeowners, regulators, system owners and other interested parties about their product including:
    - (a) Product Manuals;
    - (b) Design instructions;
    - (c) Installation instructions;
    - (d) Operation and Maintenance; and
    - (e) Homeowner instructions.
  - (4) All registrations are valid for up to one year, expiring on December 31, of each year. Fees are not prorated.
  - (5) In order to renew technology registration, a manufacturer shall:
    - (a) Apply for renewal of product registration using the form or in the format provided by the department.
    - (b) Submit the results of re-testing, if the product has completed re-testing according to the protocol required for registration and a report from the testing entity has been issued since initial registration or previous renewal. Renewal shall be based on the most recent test results.
    - (c) Provide an affidavit to the department verifying whether or not the product has changed over the previous year. If the product has changed, the affidavit must also include a full description of the changes. If the product has changes in a way that affects performance, the product may not be renewed and shall meet the requirements for initial registration.
    - (d) Submit the fee established in WAC 246-272A-990.
  - (6) As part of product registration renewal, the Department shall:
    - (a) Request field assessment comments from local health officers no later than October 31st of each year. These comments may include concerns about a variety of field assessment issues, including product function, product reliability, and problems arising with Operation and Maintenance;
    - (b) Discuss with the TAC any field assessment information that may impact product registration renewal;

- (c) Notify the manufacturer of any product to be discussed with the TAC, prior to discussion with the TAC, regarding the nature of comments received; and
- (d) Renew the product registration unless:
  - (i) The manufacturer of a product does not apply for renewal; or
  - (ii) The Department, after deliberation with the TAC, concludes product registration renewal should not be given or should be delayed until the manufacturer submits information that satisfactorily answers the concerns and issues.
- (7) The department shall maintain a list of proprietary treatment products meeting the registration requirements established in this chapter. Such product registration is a condition of approval for use.

## **NEW SECTION**

### **246-247A-0125 – Transition from the List of Approved Systems and Products to the Registered List – Treatment Products**

*New section on “grandfathering” of products on the current List of Approved Systems and Products. Includes subsection (6) from former –0125*

- (1) The department’s List of Approved Systems and Products shall:
  - a. Become static on <DATE> *(the effective date of this chapter)*. Subsequent changes, additions or deletions to the List of Approved Systems and Products will only be made when approved by the department based on completed applications received prior to <DATE> *(the effective date of this chapter)*.
  - b. Remain in effect until <DATE> *(a period of 18 month after the effective date of this chapter)*.
- (2) Treatment products not on the department’s List of Approved Systems and Products on <DATE> *(the effective date of this chapter)* and not otherwise eligible for inclusion on the list by submittal of a completed application prior to <DATE> *(the effective date of this chapter)*, must be registered with the department according to the requirements of this chapter before being permitted by the local health officer.
- (3) Between <DATE> *(the effective date of this chapter)* and <DATE> *(a period of 18 month after the effective date of this rule)*, the local health officer may permit treatment products that are on the department’s List of Approved Systems and Products or registered with the department under the requirements of this chapter.
- (4) After <DATE> *(a period of 18 month after the effective date of this rule)*, only those treatment products registered under the requirements of this chapter may be permitted by local health officers.
- (5) Manufacturers with treatment product models specified on the department’s List of Approved Systems and Products (does not include products on the list of Experimental Systems) on <DATE> *(the effective date of this chapter)*, or subsequently added to the list as provided in subsection (1)(a), above, may apply for product registration within 24 months of the effective date of this chapter using the following information:
  - a. For treatment products approved for use with typical residential sewage:
    - i. If product approval was based on performance test results obtained from testing conducted according to a NSF Standard 40 protocol dated prior to July 1996, the manufacturer may apply for registration as established by these rules using the performance test results obtained by a qualified testing facility from testing conducted according to a NSF Standard 40 test protocol dated prior to July 1996;
    - ii. Manufacturers must identify on their application for product registration if the reported product testing results use an excursion allowance. If an

- excursion allowance is used, only the excursion allowance provided in 1996 and later NSF protocols may be used.
- iii. Thirty-day averaging of sample results must meet the requirements established in 1996 and later NSF protocols;
  - iv. If product approval was based upon the performance information obtained through the department's former Experimental Systems program, manufacturers may apply for registration as established by these rules using the performance test results obtained from their experimental system program. This provision is valid for only those models listed.
- b. For products approved for use with high-strength residential or commercial sewage:
- i. Manufacturers may apply for product registration using the performance test results and other information previously provided to the department in support of product approval application.
  - ii. If product approval was based upon the performance information obtained through the department's former Experimental Systems program, manufacturers may apply for registration as established by these rules using the performance test results obtained from their experimental system program. This provision is valid for only those models listed.
- c. Test results for BOD<sub>5</sub> may be submitted in lieu of test results for CBOD<sub>5</sub>. In such cases the numerical values for CBOD<sub>5</sub>, will be determined using the following formula:  
(BOD<sub>5</sub> value x .83 = CBOD<sub>5</sub> value).
- d. In order to be registered for Treatment Levels A, B or C, a manufacturer shall provide data demonstrating that each of the parameters (CBOD<sub>5</sub>, TSS and fecal coliform) is met.
- e. Fecal coliform reduction performance must be demonstrated according to the provisions and requirements established in WAC 246-272A-0130 Bacteriological Reduction.
- f. Manufacturers and treatment products shall meet all other requirements established in these rules for product registration.

## **NEW SECTION**

### **246-272A-0130 Bacteriological Reduction**

- *Former –0130 has been deleted and incorporated into –0100*
- *Taken (3) from old –0120 to create this section on the requirements for bacteriological reductions*
- *Deleted old section –0126 and incorporated into this new section*
- *Expanded (2) to address all types of disinfection equipment.*

(1) Manufacturers shall, for the purpose of product registration, verify bacteriological reduction performance by sampling for fecal coliform while the treatment product is tested according to ANSI/NSF Standard 40 — Residential Wastewater Treatment Systems testing protocol and shall:

- (a) Obtain samples drawn from the influent and effluent stream, identifying the treatment performance achieved by the full treatment process (component or sequence);
- (b) Obtain influent characteristics falling within a range of 10<sup>6</sup> – 10<sup>8</sup> fecal coliform/100mL.
- (c) Report the geometric mean of fecal coliform test results from all samples drawn within 30-day or monthly calendar periods;

- (d) Obtain a minimum of three grab samples per week throughout the testing period (including design loading and stress loading recovery periods);
  - (e) Obtain samples for fecal coliform analysis, one grab sample each week from each of the three daily design loading periods during the design loading periods of the test. During the stress loading recovery periods of the test, grab samples shall similarly be obtained during times of hydraulic loading;
  - (f) Conduct analyses according to Standard Methods and report the individual results of all samples drawn throughout the test period design & stress loading; and,
  - (g) Report all maintenance, including instances of servicing the product.
- (2) Manufacturers using disinfection for bacteriological reduction shall:
- (a) Report all maintenance and servicing conducted during the testing period, including for example, instances of cleaning an UV lamp, or replenishment of chlorine chemicals; and,
  - (b) Test the influent to the disinfection unit and report the following at each occasion of sampling performed in (1) of this section:
    - (i) Flow rate;
    - (ii) pH;
    - (iii) Temperature;
    - (iv) Turbidity; and
    - (v) Color.
- (3) Manufacturers may register products in Treatment Levels A and B using disinfection. Manufacturers may not register products for Treatment Level C using disinfection.

## **NEW SECTION**

### **246-272A-0135 Transition from the List of Approved Systems and Products to the Registered List — Bacteriological Reduction**

*New section to allow transition of bacteriological reduction products from the Approved List to the Registered List*

- (1) The department's List of Approved Systems and Products shall:
- (a) Become static on <DATE> *(the effective date of the this chapter)*. Subsequent changes, additions or deletions to the List of Approved Systems and Products will only be made when approved by the department based on completed applications received prior to <DATE> *(the effective date of this chapter)*.
  - (b) Remain in effect until <DATE> *(a period of 18 month after the effective date of this chapter)*.
- (2) Systems on the department's List of Approved Systems and Products meeting the BOD<sub>5</sub> and TSS requirements for Treatment Standards 1 and 2 may continue to be used with disinfection equipment and methods specified by the onsite sewage system designer to meet or exceed the fecal coliform reduction performance required by Treatment Standards 1 and 2, only while the department's List of Approved Systems and Products remains in effect.

## **NEW SECTION**

### **246-272A-0140 Proprietary Distribution Products—Criteria and Registration**

- *(1) has been moved to -0200(4)(b) and replaced with a new (1) giving direction to manufacturers to register products*



- *Old (3) has been incorporated into new (1)*
- (1) Manufacturers shall register proprietary distribution products including, gravelless distribution products or sub-surface drip products, with the department to be eligible to be permitted by local health officers.
  - (2) Manufacturers desiring to sell proprietary distribution products shall certify that their product(s) meets the standards established in this chapter and register their product(s) with the department using the process described in WAC 246-272A-0145.
  - (3) Proprietary gravelless distribution products shall:
    - (a) Be constructed or manufactured from materials that are non-decaying and non-deteriorating and must not leach chemicals when exposed to sewage and the subsurface soil environment;
    - (b) Provide liquid storage volume at least equal to the storage volume provided within the 30% void space in a 12-inch layer of drain rock in a drain rock-filled distribution system. This storage volume must be established by the gravelless distribution products, system design and installation and must be maintained for the life of the system. This requirement may be met on a lineal-foot, or on an overall system design basis;
    - (c) Provide suitable effluent distribution to the infiltrative surface at the soil interface; and,
    - (d) Maintain the integrity of the trench or bed. The material used, by its nature and its manufacturer-prescribed installation procedure, must withstand the physical forces of the soil sidewalls, soil backfill and the weight of equipment used in the backfilling.
  - (4) Proprietary sub-surface drip product dripline shall:
    - (a) Be warranted by the manufacturer for use with sewage and for resistance to root intrusion.
    - (b) Incorporate emitters with a maximum nominal rated discharge of 1.3 gallons per hour. Emitter discharge rate may be controlled either by use of pressure-compensating emitters or with a pressure regulator.
    - (c) Be color-coded purple to identify that the pipe contains non-potable water from a sewage source.

## **NEW SECTION**

### **246-272A-0145 Proprietary Distribution Products –Process and Requirements**

- *Former (4) has been moved to new section –0150*
  - *A new (3) has been added requiring manufacturers to have product information readily available to all interested parties*
  - *New (6) deals with product concerns from field assessments and their impact on registration renewal*
- (1) Manufacturers shall register their proprietary distribution product(s) by submitting a complete application in the format provided by the department, including:
    - (a) Manufacturer name, mailing address, street address, and phone number.

- (b) Contact individual name, mailing address, street address, and phone number. The contact individual must be vested with the authority to act as the agent of the manufacturer in this capacity;
  - (c) Name, including specific brand and model, of the proprietary distribution product;
  - (d) A description of the function of the proprietary distribution product along with any known or projected limitations on its use;
  - (e) Product description and technical information, including schematics; materials & characteristics; component design specifications; design capacity, volumes and flow assumptions & calculations; components; dimensioned drawings & photos;
  - (f) Siting & installation requirements;
  - (g) Detailed description, procedure and schedule of routine service and system maintenance events;
  - (h) Identification of information that is subject to protection from disclosure for trade secrets;
  - (i) Copies of product brochures & manuals: Sales & Promotional; Design; Installation; Operation & Maintenance; and Homeowner Instructions;
  - (j) For gravelless chamber systems a quantitative description of the actual exposed trench-bottom infiltrative surface area for each model seeking registration;
  - (k) A statement from a professional engineer that certifies the technology meets the standards established in WAC 246-272A-0140;
  - (l) A signed and dated certification by the manufacturer's agent specifically including the following statement, "I certify that I represent (INSERT MANUFACTURING COMPANY NAME) and I am authorized to prepare or direct the preparation of this application for product registration. I attest, under penalty of law, that this document and all attachments, are true, accurate, and complete."
  - (m) A signed and dated certification from the licensed professional engineer including the statement, "I certify that I represent (INSERT PROFESSIONAL ENGINEERING FIRM NAME), that I am authorized to certify the performance characteristics for the proprietary distribution product presented in this application. I attest, under penalty of law, that the technology report is true, accurate, and complete."
  - (n) The fee established in WAC 246-272A-0990.
- (2) Products within a single series or model line (sharing distinct similarities in design, materials, capacities) may be registered under a single application. Products outside of the series or model line must be registered under separate applications.
- (3) Manufacturers shall have readily accessible information for designers, homeowners, regulators, system owners and other interested parties about their product including:
- (a) Product Manuals;
  - (b) Design instructions;

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- (c) Installation instructions;
  - (d) Operation and Maintenance; and
  - (e) Homeowner instructions.
- (4) All registrations are valid for up to one year, expiring on December 31<sup>st</sup> of each year. Required fees are not prorated.
- (5) In order to renew a proprietary distribution product registration, a manufacturer shall:
- (a) Apply for renewal of product registration using the form or in the format provided by the department;
  - (b) Provide an affidavit to the department verifying whether or not the product has changed over the previous year. If the product has changed, the affidavit must also include a full description of the changes. If the product has changes in a way that affects performance, the product may not be renewed and shall meet the requirements of initial registration; and,
  - (c) Submit the fee established in WAC 246-272A-0990.
- (6) As part of product registration renewal, the Department shall:
- (b) Request field assessment comments from local health officers no later than October 31<sup>st</sup> of each year. These comments may include concerns about a variety of field assessment issues, including product function, product reliability, and problems arising with Operation and Maintenance;
  - (c) Discuss with the TAC any field assessment information that may impact product registration renewal;
  - (d) Notify the manufacturer of any product to be discussed with the TAC, prior to discussion with the TAC, regarding the nature of comments received; and
  - (e) Renew the product registration unless:
    - (i) The manufacturer of a product does not apply for renewal; or
    - (ii) The Department, after deliberation with the TAC, concludes product registration renewal should not be given or should be delayed until the manufacturer submits information that satisfactorily answers the concerns and issues.
- (8) The department shall maintain a list of proprietary distribution products meeting the registration requirements established in this chapter. Such product registration is a condition of approval for use.

**NEW SECTION**

**246-272A-0150 Transition from the List of Approved Systems and Products to the Registered List – Distribution Products**

*New section based on the old -0145(4)*

- (1) The department's List of Approved Systems and Products shall:
- (a) Become static on <DATE> (*the effective date of this chapter*). Subsequent changes, additions or deletions to the List of Approved Systems and Products will only be made when approved by the department based on completed applications received prior to <DATE> (*the effective date of this chapter*).
  - (b) Remain in effect until <DATE> (*for a period of 18 month after the effective date of this chapter*).
- (2) Distribution products not on the department's List of Approved Systems and Products on <DATE> (*the effective date of this chapter*) and not otherwise eligible for inclusion on the list

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by submittal of a completed application prior to <DATE> *(the effective date of this chapter)*, must be registered with the department according to the requirements of this chapter before being permitted by the local health officer.

- (3) Between <DATE> *(the effective date of this chapter)* and <DATE> *(a period of 18 month after the effective date of this rule)*, the local health officer may permit distribution products that are on the department's List of Approved Systems and Products or registered by the department under the requirements of this chapter.
- (4) After <DATE> *(a period of 18 month after the effective date of this rule)*, only those distribution products registered under this chapter may be permitted by local health officers.
- (5) Manufacturers with distribution product models specified on the department's List of Approved Systems and Products (does not include products on the list of Experimental Systems) on <DATE> *(the effective date of this chapter)*, or subsequently added to the list as provided in subsection (1)(a), above, may apply for product registration within 24 months of the effective date of this chapter using the following information:
  - (a) Manufacturers may apply for registration using the information previously provided to the department in support of product approval application, without further professional engineer certification.
  - (b) If product approval was based upon the performance information obtained through the department's former Experimental Systems program, the manufacturer may apply for registration as established by these rules using the performance test results obtained from their experimental system program, without further professional engineer certification. This provision is valid for only those models listed.
  - (c) Manufacturers and distribution products shall meet all other requirements established in these rules for product registration.

## **NEW SECTION**

### **246-272A-0170 Product Development Permits**

*(3) has been amended to clarify that the local health officer may request performance data.*

- (1) A local health officer may issue a product development permit (PDP) for any proprietary treatment component or sequence. In order to protect public health during the development period, a complete system able to meet the requirements of this chapter and the site must be installed. The product under development may then be added to the treatment system allowing the product developer to gather data about the product's performance in the field. The PDP allows product developers to explore and develop new technologies prior to product testing and registration under section 246-272A-0110 and -0120. The PDP is not an alternative to testing and registration.
- (2) An application for a PDP shall include all of the following:
  - (a) Proof of an existing conforming system in compliance with all local requirements, or a permit for a conforming system. The conforming system must be installed in its entirety before the PDP becomes valid;
  - (b) A description of the product under development including performance goals and a description of how the system will be used to treat sewage;

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- (c) Documentation of financial assurance that will cover the correction of any potential public health threats or environmental damage resulting from the use of the product under development. Instruments of financial assurance include:
    - (i) An irrevocable letter of credit in the amount required by the local health officer issued by an entity authorized to issue letters of credit in Washington state;
    - (ii) Cash or security deposit payable to the local health jurisdiction in the amount required by the local health officer; or
    - (iii) Any other financial assurance that satisfies the local health officer.
  - (d) Documentation signed by the owner of the proposed product development site allowing access to the local health officer for inspection of the site; and
  - (e) Any other information required by the local health officer.
- (3) The local health officer may stipulate additional requirements for a PDP necessary to assure the performance of the conforming system, including providing performance data to the local health officer.
- (4) A PDP is a site-specific permit. Product development at multiple sites requires a PDP for each site.
- (5) During the term of the PDP, product development, testing and sampling are under the full control of the product developer and all data collected is considered proprietary information.
- (6) A PDP is valid for one year and may be renewed by the local health officer.
- (7) The product development period is over when the original PDP or any subsequently renewed permits have expired. At this time the product developer:
- (a) Shall, at the direction of the local health officer, remove the product under development from the site, re-establishing all appropriate plumbing and power connections for the conforming system.
  - (b) May subject the product to performance testing described in WAC 246-272A-0110 in order to allow the product to be eligible for registration with the department.
- (8) The local health officer may revoke or amend a PDP:
- (a) If the continued operation or presence of the product under development:
    - (i) Presents a risk to the public health or the environment;
    - (ii) Causes adverse effects on the proper function of the conforming system on the site; or
    - (iii) Leaks or discharges sewage on the surface of the ground.
  - (b) If the developer fails to comply with any requirements stipulated on the permit by the local health officer.

(9) The local health officer may charge fees adequate to administer the PDP program.

## **NEW SECTION**

### **246-272A-0175 Transition from the Experimental System Program to the Product Development Permit Program**

*New section added to clarify how currently listed experimental systems will be handled.*

- (1) The department's List of Approved Systems and Products shall:
  - (a) Become static on <DATE> *(the effective date of this chapter)*. Subsequent changes, additions or deletions to the List of Approved Systems and Products will only be made when approved by the department based on completed applications received prior to <DATE> *(the effective date of this chapter)*.
  - (b) Remain in effect until <DATE> *(a period of 18 month after the effective date of this chapter)*.
- (2) Persons representing experimental treatment systems not on the department's List of Approved Systems and Products on <DATE> *(the effective date of this chapter)* and not otherwise eligible for inclusion on the list by submittal of a completed application prior to <DATE> *(the effective date of this chapter)*, may apply to a local health officer for a Product Development Permit.
- (3) Those persons representing experimental treatment systems on the department's List of Approved Systems and Products on <DATE> *(the effective date of this chapter)* may continue with the experimental testing according to the experimental testing protocol agreed to by the department until completed.
- (4) Those persons representing experimental treatment systems on the department's List of Approved Systems and products on <DATE> *(the effective date of this chapter)* upon completion of testing according to the experimental testing protocol agreed to by the department may apply to the department for treatment product approval and registration consistent with the provisions of WAC 246-272A-0125 Transition from the List of Approved Systems and Products to the Registered List – Treatment Products. The results of the experimental testing protocol are subject to review by the department and the Technical Advisory Committee (TAC). The department must obtain a recommendation for product approval based upon the results of experimental testing from the TAC prior to departmental approval, leading the way to product registration. The experimental testing program shall cease without departmental product approval for those products that do not garner an approval recommendation from the TAC. Further product development may continue under the provisions and requirements of WAC 246-272A-0170 Product Development Permits. Further product development, testing, or approval consideration would not occur under the department's previous Experimental System Program.

### **246-272A-0200 Permit Requirements**

- *New section title.*
- *A new (2) has been added to describe when a permit is not necessary*
- *New (4 (b) has been added from the old –0120(1) and –0140(1) specifying that local health officers may only permit products on the registered list.*
- *(4)(c) has been amended to clarify that the expiration date on permits shall not exceed five years.*

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- (1) Prior to beginning the construction process, a person proposing the installation, repair, modification, connection to, or expansion of an OSS, shall report the following to the local health officer and obtain approval:
  - (a) General information including:
    - (i) Name and address of the property owner and the applicant at the head of each page of submission;
    - (ii) Parcel number and if available, the address of the site;
    - (iii) Source of drinking water supply;
    - (iv) Identification if the property is within the boundaries of a recognized sewer utility;
    - (v) Size of the parcel;
    - (vi) Type of permit for which application is being made, for example, new installation, repair, expansion, alteration, or operational;
    - (vii) Source of sewage, for example, residential, restaurant, or other type of business;
    - (viii) Location of utilities;
    - (ix) Name of the site evaluator;
    - (x) Name and signature of the designer;
    - (xi) Date of application;
    - (xii) Name of applicant; and
    - (xiii) Name and signature of owner or owner's authorized agent.
  - (b) The soil and site evaluation as specified under WAC 246-272A-0220.
  - (c) A dimensioned site plan of the proposed initial system, the reserve area and those areas immediately adjacent that contain characteristics impacting design including:
    - (i) Designated areas for the proposed initial system and the reserve area;
    - (ii) The location of all soil logs and other soil tests for the OSS;
    - (iii) General topography and/or slope;
    - (iv) Drainage characteristics;
    - (v) The location of existing and proposed encumbrances affecting system placement, including legal access documents if any component of the OSS is not on the lot where the sewage is generated; and
    - (vi) An arrow indicating north.
  - (d) A detailed system design meeting the requirements under WAC 246-272A-0230, -0232, -0234, & -0238 including:
    - (i) A drawing showing the dimensioned location of components of the proposed OSS, and the system designed for the reserve area if reserve site characteristics differ significantly from the initial area;
    - (ii) Vertical cross-section drawings showing:
      - (A) The depth of the dispersal component, the vertical separation, and depth of soil cover; and

- (B) Other OSS components constructed at the site.
  - (iii) Calculations and assumptions supporting the proposed design, including:
    - (A) System operating capacity and design flow;
    - (B) Soil type; and,
    - (C) Hydraulic loading rate in the dispersal component; and,
  - (e) Such additional information as deemed necessary by the local health officer.
- (2) A permit is not required for replacement, addition or alteration of broken or malfunctioning building sewers, risers and lids, sewage tank lids, sewage tank baffles, sewage tank pumps, pump control floats, pipes connecting multiple sewage tanks, and OSS inspection boxes and ports where the SSAS is not failing.
- (3) The local health officer may develop the information required in subsection (1) of this section if authorized by local regulations.
- (4) The local health officer shall:
- (a) Respond to an application within 30 days as required in RCW 70.05.074.
  - (b) Permit only products and technologies that are registered with the department and have RS&G for their use. During the period of transition in WAC 246-272A-0125 from the List of Approved Systems and Products to the Registered List, the local health officer may permit products on the List of Approved Systems and Products.
  - (c) Issue a permit when the information submitted under subsection (1) of this section meets the requirements contained in this chapter and in local regulations;
  - (d) Identify the permit as a new installation, repair, expansion, modification, or operational permit;
  - (e) Specify the expiration date on the permit, not to exceed five years;
  - (f) Include a reminder on the permit application of the applicant's right of appeal; and
  - (g) If requiring an operational permit, state the period of validity and the date and conditions of renewal.
- (5) The local health officer may revoke or deny a permit for due cause. Examples include, but are not limited to:
- (a) Development or continued use of an OSS that threatens the public health;
  - (b) Misrepresentation or concealment of material fact in information submitted to the local health officer; or
  - (c) Failure to meet conditions of the permit, this chapter or any local regulations.
- (6) Before the local health officer issues a permit for the installation of an OSS to serve more than one development, the applicant shall show:
- (a) An approved public entity owning or managing the OSS in perpetuity; or
  - (b) A management arrangement acceptable to the local health officer, recorded in covenant, lasting until the onsite system is no longer needed, and containing, but not limited to:
    - (i) A recorded easement allowing access for construction, operation, monitoring maintenance, and repair of the OSS; and



- (ii) Identification of an adequate financing mechanism to assure the funding of operation, maintenance, and repair of the OSS.
- (7) The local health officer shall not delegate the authority to issue permits.
- (8) The local health officer may stipulate additional requirements for a particular permit if necessary for public health protection.

**246-272A-0210 Location.**

- *Changes to setback table include:*
    - *Added in-ground swimming pool to Building foundation row*
    - *Tried to clarify language under interceptor row by adding a new row;*
    - *Added a new row to show setback from stormwater infiltration system or soil dispersal component*
  - *Deleted the marine expansion exemption in (5)*
  - *Removed the allowance to develop with reduced horizontal separation of 75 feet from marine surface water*
- (1) Persons shall design and install OSS to meet the minimum horizontal separations shown in Table IV, Minimum Horizontal Separations:

**TABLE IV**  
**Minimum Horizontal Separations**

Items Requiring Setback	From edge of soil dispersal component and reserve area	From septic tank, holding tank, containment vessel, pump chamber, and distribution box	From building sewer, collection, and non-perforated distribution line
Well or suction line	100 ft.	50 ft.	50 ft.
Public drinking water well	100 ft.	100 ft.	100 ft.
Public drinking water spring <sup>1</sup> measure from the ordinary high water mark ,	200 ft.	200 ft.	100 ft.
Spring or surface water used as drinking water source <sup>1</sup> , measured from the ordinary high water mark.	100 ft.	50 ft.	50 ft.
Pressurized water supply line	10 ft.	10 ft.	10 ft.
Decommissioned well (decommissioned in accordance with chapter 173-160 WAC)	10 ft.	N/A	N/A
Surface water measured from the ordinary high water mark	100 ft.	50 ft.	10 ft.
Building foundation/in-ground swimming pool	10 ft.	5 ft.	2 ft.
Property or easement line	5 ft.	5 ft.	N/A
Interceptor / curtain drains/ foundation drains/drainage ditches			
Down-gradient <sup>2</sup>	30 ft.	5 ft.	N/A
Up-gradient <sup>2</sup>	10 ft.	N/A	N/A
Any site features that may allow effluent to surface			
Down-gradient <sup>2</sup>	30ft	5ft	N/A
Up-gradient <sup>2</sup>	10ft	N/A	N/A
Down-gradient cuts or banks with at least 5 ft. of original, undisturbed soil above a restrictive layer due to a structural or textural change.	25 ft.	N/A	N/A
Down-gradient cuts or banks with less than 5 ft. of original, undisturbed, soil above a restrictive layer due to a structural or textural change.	50 ft.	N/A	N/A
Soil dispersal components/subsurface stormwater infiltration systems	10ft.	N/A	N/a

<sup>1</sup> If surface water is used as a public drinking water supply, the designer shall locate the OSS outside of the required source water protection area.

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<sup>2</sup> The item is down-gradient when liquid will flow toward it upon encountering a water table or a restrictive layer. The item is up-gradient when liquid will flow away from it upon encountering a water table or restrictive layer.

- (2) Where any condition indicates a greater potential for contamination or pollution, the local health officer may increase the minimum horizontal separations. Examples of such conditions include excessively permeable soils, unconfined aquifers, shallow or saturated soils, dug wells, and improperly abandoned wells.
- (3) The local health officer may allow a reduced horizontal separation to not less than two feet where the property line, easement line, or building foundation is up-gradient.
- (4) The horizontal separation between an OSS dispersal component and an individual water well, individual spring, non-marine surface water, or surface water that is not a public water source can be reduced to a minimum of 75 feet, by the local health officer, and be described as a conforming system upon signed approval by the health officer if the applicant demonstrates:
  - (a) Adequate protective site-specific conditions, such as physical settings with low hydro-geologic susceptibility from contaminant infiltration. Examples of such conditions include evidence of confining layers and or aquatards separating potable water from the OSS treatment zone, excessive depth to groundwater, down-gradient contaminant source, or outside the zone of influence; or
  - (b) Design and proper operation of an OSS system assuring enhanced treatment performance beyond that accomplished by meeting the vertical separation and effluent distribution requirements described in WAC 246-272-0230 Table VI; or
  - (c) Evidence of protective conditions involving both 4(a) and (b) of this section.
- (5) Persons shall design and/or install soil dispersal components only where:
  - (a) The slope is less than forty-five percent (twenty-four degrees);
  - (b) The area is not subject to:
    - (i) Encroachment by buildings or construction such as placement of power poles and underground utilities;
    - (ii) Cover by impervious material;
    - (iii) Vehicular traffic; or
    - (iv) Other activities adversely affecting the soil or the performance of the OSS.
  - (c) Sufficient reserve area for replacement exists to treat and dispose 100% of the design flow;
  - (d) The land is stable; and
  - (e) Surface drainage is directed away from the site.
- (6) The local health officer may approve a sewer transport line within 10 feet of a water supply line if the sewer line is constructed in accordance with section C1-9 of the department of ecology's "Criteria For Sewage Works Design," December 1998.

**NEW SECTION**

**246-272A-0220 Soil and Site Evaluation.**

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- *Added clarification to (2)(a)(iii)&(iv) to focus on areas immediately adjacent to the system that may impact the design to minimize conflict with land surveyor duties*
- (1) Only professional engineers, designers, soil scientists, or local health officers may perform soil and site evaluations.
  - (2) The person evaluating the soil and site shall:
    - (a) Report:
      - (i) A sufficient number of soil logs to evaluate conditions within:
        - (A) The initial soil dispersal component; and
        - (B) The reserve area.
      - (ii) The ground water conditions, the date of the observation, and the probable maximum height;
      - (iii) The topography of the proposed initial system, the reserve area and those areas immediately adjacent that contain characteristics impacting the design;
      - (iv) The drainage characteristics of the proposed initial system, the reserve area and those areas immediately adjacent that contain characteristics impacting the design;
      - (v) The existence of structurally deficient soils subject to major wind or water erosion events such as slide zones and dunes;
      - (vi) The existence of designated flood plains; and
      - (vii) The location of existing features affecting system placement, such as, but not limited to:
        - (A) Wells and suction lines;
        - (B) Water sources and supply lines;
        - (C) Surface water and subsurface stormwater infiltration areas;
        - (D) Abandoned wells;
        - (E) Outcrops of bedrock and restrictive layers;
        - (F) Buildings;
        - (G) Property lines and lines of easement;
        - (H) Interceptors such as footing drains, curtain drains and drainage ditches;
        - (I) Cuts, banks, and fills;
        - (J) Driveways and parking areas;
        - (K) Existing OSS; and
        - (L) Underground utilities.
    - (b) Use the soil and site evaluation procedures and terminology in accordance with Chapter 5 of the Onsite Wastewater Treatment Systems Manual, EPA 625/R-00/008, February 2002 except where modified by, or in conflict, with this chapter (available upon request to the department);
    - (c) Use the soil names and particle size limits of the United States Department of Agriculture Natural Resources Conservation Service classification system;

- (d) Determine texture, structure, compaction and other soil characteristics that affect the treatment and water movement potential of the soil by using normal field and/or laboratory procedures such as particle size analysis; and
- (e) Classify the soil as in Table V, Soil Textural Classification:

**TABLE V**  
**Soil Textural Classification**

<b>Soil Type</b>	<b>Soil Textural Classifications</b>
<b>1</b>	Gravelly and very gravelly coarse sands, all extremely gravelly soils excluding Soil Types 5 and 6, all soil types with greater than or equal to 90% rock fragments.
<b>2</b>	Coarse sands.
<b>3</b>	Medium sands, loamy coarse sands, loamy medium sands.
<b>4</b>	Fine sands, loamy fine sands, sandy loams, loams.
<b>5</b>	Very fine sands, loamy very fine sands; or silt loams, sandy clay loams, clay loams and silty clay loams with a moderate or strong structure (excluding platy structure)
<b>6</b>	Other silt loams, sandy clay loams, clay loams, silty clay loams.
<b>7 Unsuitable for treatment or dispersal</b>	Sandy clay, clay, silty clay, strongly cemented or firm soils, soil with a moderate or strong platy structure, any soil with a massive structure, any soil with expanding clays.

- (3) The owner of the property or his agent shall:
  - (a) Prepare the soil log excavation to:
    - (i) Allow examination of the soil profile in its original position by:
      - (A) Excavating pits of sufficient dimensions to enable observation of soil characteristics by visual and tactile means to a depth three feet deeper than the anticipated infiltrative surface at the bottom of the soil dispersal component; or
      - (B) Stopping at a shallower depth if a water table or restrictive layer is encountered;
    - (ii) Allow determination of the soil's texture, structure, color, bulk density or compaction, water absorption capabilities or permeability, and elevation of the highest seasonal water table; and
  - (b) Assume responsibility for constructing and maintaining the soil log excavation in a manner to prevent injury as required by chapter 296-155 WAC.
- (4) The local health officer:
  - (a) Shall render a decision on the height of the water table within 12 months of receiving the application under precipitation conditions typical for the region;
  - (b) May require water table measurements to be recorded during months of probable high-water table conditions, if insufficient information is available to determine the highest seasonal water table;
  - (c) May require any other soil and site information affecting location, design, or installation; and

- (d) May reduce the required number of soil logs for OSS serving a single-family residence if adequate soils information has previously been developed.

## NEW SECTION

### 246-272A-0230 Design Requirements – General

- *(1) Homeowners along marine shorelines may not design their own system;*
  - *(2) Clarifies that the designer is responsible for stated activities;*
  - *(2)(d) Modified the design flow detail for single family residences;*
  - *New (3) specifies coarsest soil within selected vertical separation determines minimum treatment level and distribution method*
  - *Removed (4)(iii) because redundant due to treatment level table requirements*
- (1) Onsite sewage systems shall be designed only by professional engineers, licensed under chapter 18.43 RCW or onsite sewage treatment system designers licensed, under chapter 18.210 RCW, except:
- (a) If at the discretion of the local health officer, a resident owner of a single family residence not adjacent to a marine shoreline is allowed to design a system for that residence; or
  - (b) If the local health officer performs the soil and site evaluation, the health officer is allowed to design a system.
- (2) The designer shall use the following criteria when developing a design for an OSS:
- (a) All sewage from the building served is directed to the OSS;
  - (b) Sewage tanks have been reviewed and approved by the department;
  - (c) Drainage from the surface, footing drains, roof drains, and other non-sewage drains is prevented from entering the OSS, the area where the OSS is located, and the reserve area;
  - (d) The OSS is designed to treat and disperse the sewage volume as follows:
    - (i) For single family residences:
      - (A) The operating capacity is based on 45 gpd per capita with 2 people per bedroom.
      - (B) The minimum design flow per bedroom per day is the operating capacity of 90 gallons multiplied by 1.33. This results in a minimum design flow of 120 gallons per bedroom per day.
      - (C) A factor greater than 0.33 to account for surge capacity may be required by the local health officer.
      - (D) The local health officer may require an increase of the design flow for dwellings with anticipated greater flows, such as larger dwellings.
      - (E) The minimum design flow is 240 gallons per day.
    - (ii) For other facilities, the design flows noted in “Onsite Wastewater Treatment Systems Manual”, United States Environmental Protection Agency, EPA-625/R-00/008, February 2002 (available upon request to the department). If the type of facility is not listed in the EPA design manual, design flow information from comparable facilities may be used at the discretion of the local health officer.
  - (e) The OSS is designed to treat and disperse sewage quality as follows:
    - (i) For all systems, when designing for sewage quality, the designer shall consider:
      - (A) CBOD<sub>5</sub>, TSS, and O&G;

- (B) Other parameters that can adversely affect treatment anywhere along the treatment sequence. Examples include pH, temperature and dissolved oxygen;
- (C) The sensitivity of the site where the OSS will be installed. Examples include areas where fecal coliform constituents can result in public health concerns, such as shellfish growing areas, designated swimming areas, etc.
- (D) Nitrogen shall be addressed through lot size and/or treatment where it has been identified by a local health jurisdiction as a contaminant of concern.
- (ii) For OSS treating sewage from a non-residential source, the designer shall provide the following information:
  - (A) Information to show the sewage is not industrial wastewater;
  - (B) Information regarding the sewage quality and identifying chemicals found in the sewage that are not found in sewage from a residential source; and
  - (C) A design providing treatment equal to that required of sewage from residential source.
- (f) Treatment Levels:
  - (i) Requirements for matching Treatment Component and method of distribution with soil conditions of the Soil Dispersal Component are listed in Table VI. The Treatment Levels correspond with those established for treatment components under the product performance testing requirements in WAC 246-272A-0110.
  - (ii) Disinfection may not be used to achieve the fecal coliform requirements to meet:
    - (A) Treatment Levels A or B in Type 1 soils; or
    - (B) Treatment Level C.

**TABLE VI**

***Treatment Component Performance Levels and Method of Distribution<sup>1</sup>***

Vertical Separation in inches	Soil Type		
	1	2	3-6
12 < 18	A – pressure	B – pressure	B – pressure
≥18 < 24	B – pressure	B – pressure	B – pressure
≥24 < 36	B – pressure	C – pressure	E – pressure
≥36 < 60	B – pressure	E – pressure	E – gravity
≥ 60	C – pressure	E – gravity	E – gravity

<sup>1</sup>The treatment component performance levels correspond with those established for treatment components under the product testing requirements in WAC 246-272A-0110.

(3) The coarsest textured soil within the vertical separation selected by the designer determines the minimum Treatment Level and method of distribution. The vertical separation used to determine the Treatment Level must be consistent with the vertical separation used to determine the hydraulic loading rate.

(4)The local health officer shall not approve designs for:

- (i) Cesspools; or
- (ii) Seepage pits.

- (5) The local health officer may approve a design for the reserve area different from the design approved for the initial OSS, if both designs meet the requirements of this chapter for new construction;
- (6) The local health officer may allow the infiltrative surface area in a SSAS to include six inches of the SSAS sidewall height when meeting the required absorption area where total recharge by annual precipitation and irrigation is less than twelve inches per year.

### **246-272A-0232 Design Requirements – Septic tank sizing**

- *New section title*
- *Modified sizing for septic tanks serving a residential source other than a single family residence*
- *Removed access and design requirements for pump chambers and septic tanks because access requirements are in –0238 and other requirements will be in sewage tank regulations*

(1) Septic Tanks shall:

- (a) Have at least two compartments with the first compartment liquid volume equal to  $\frac{1}{2}$  to  $\frac{2}{3}$  of the total liquid volume.
- (b) Have the following minimum liquid volumes:
  - (i) For a single family residence use Table VII, Required Minimum Liquid Volumes of Septic Tanks:

**TABLE VII**  
***Required Minimum Liquid Volumes Of Septic Tanks***

<b>Number of Bedrooms</b>	<b>Required minimum liquid tank volume in gallons</b>
<b><math>\leq 3</math></b>	900
<b>4</b>	1000
<b>Each additional bedroom</b>	250

- (ii) For OSS treating sewage from a residential source, other than one single family residence, 250 gallons per bedroom with a minimum of 1000 gallons;
- (iii) For OSS treating sewage from a non-residential source, 3 times the design flow.

### **NEW SECTION**

### **246-272A-0234 Design Requirements – Soil Dispersal Components**

- *Added new (1)(c) specifying that the hydraulic loading rate is based on the finest texture soil in the selected vertical separation*
- *(1)(f) modified pressure distribution requirement to include timed dosing for systems 1,000 to 3500 gallons per day*
- *Removed (3)(a) & (c) and placed in definition; (3)(b) moved to (2)(h)*



- *Added new (3) specifying minimum drain rock depth above distribution pipe*
- *New (5) allowing increased loading rate for products tested to Treatment Level D*
- *New (6) specifies that 100% primary and reserve areas*

(1) All soil dispersal components shall be designed to meet the following requirements:

(a) Maximum hydraulic loading rates shall be based on the rates described in Table VIII;

**TABLE VIII  
Maximum Hydraulic Loading Rate**

<b>Soil Type</b>	<b>Soil Textural Classification Description</b>	<b>Loading Rate for residential effluent using gravity or pressure distribution gal./sq. ft./day</b>
<b>1</b>	Gravelly and very gravelly coarse sands, all extremely gravelly soils excluding Soil Types 5 & 6, all soil types with greater than or equal to 90% rock fragments.	1.0
<b>2</b>	Coarse sands	1.0
<b>3</b>	Medium sands, loamy coarse sands, loamy medium sands.	0.8
<b>4</b>	Fine sands, loamy fine sands, sandy loams, loams.	0.6
<b>5</b>	Very fine sands, loamy very fine sands; or silt loams, sandy clay loams, clay loams and silty clay loams with a moderate structure or strong structure (excluding a platy structure)	0.4
<b>6</b>	Other silt loams, sandy clay loams, clay loams, silty clay loams.	0.2
<b>7</b>	Sandy clay, clay, silty clay and strongly cemented firm soils, soil with a moderate or strong platy structure, any soil with a massive structure, any soil with expanding clays	Not suitable

(b) Calculation of the absorption area is based on:

- (i) The design flow in section -0230(2); and,
- (ii) Loading rates equal to or less than those in Table VIII applied to the infiltrative surface of the soil dispersal component.

(c) The finest textured soil within the vertical separation selected by the designer determines the maximum hydraulic loading rate according to Table VIII. The vertical separation used to determine the hydraulic loading rate must be consistent with the vertical separation used to determine the Treatment Level.

(d) Requirements for the method of distribution shall correspond to those in Table VI.

(e) For those systems requiring pressure distribution, timed dosing is also required.

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- (f) Soil dispersal components having daily design flow between 1,000 and 3,500 gallons of sewage per day shall:
  - (i) Only be located in Soil Types 1-5
  - (ii) Only be located on slopes of less than thirty percent, or seventeen degrees; and
  - (iii) Have pressure distribution, with timed dosing.
- (2) All SSAS shall meet the following requirements:
  - (a) The calculation of absorption area is based upon the design flow in subsection -0230(2) and loading rates equal to or less than those in Table VIII, Maximum Hydraulic Loading Rate, and applied only to the infiltrative surface at the bottom of the trench or bed.
  - (b) The infiltrative surface may not be deeper than three feet below the finished grade, except under special conditions approved by the local health officer. The depth of such system shall not exceed ten feet from the finished grade;
  - (c) A minimum of six inches of sidewall must be located in original undisturbed soil;
  - (d) The sidewall below the invert of the distribution pipe is located in original undisturbed soil;
  - (e) Beds are only designed in Soil Types 1,2,3 or in fine sands with a width not exceeding 10 feet;
  - (f) Individual laterals greater than 100 feet in length must use pressure distribution;
  - (g) A layer of between six and twenty-four inches of cover material.
  - (h) Other features shall conform with the "Onsite Wastewater Treatment Systems Manual," United States Environmental Protection Agency EPA-625/R-00/008 February 2002 (available upon request to the department) except where modified by, or in conflict with this section or local regulations.
- (3) For SSAS with drain rock, a minimum of two inches of drain rock is required above the distribution pipe.
- (4) The local health officer may permit systems consisting solely of a septic tank and a gravity SSAS in Soil Type 1 if all the following criteria are met:
  - (a) The system serves a single family residence;
  - (b) The lot size is greater than 2.5 acres;
  - (c) Annual precipitation in the region is less than 25 inches per year as described by "Washington Climate" published jointly by the Cooperative Extension Service, College of Agriculture, and Washington State University (available for inspection at Washington state libraries);
  - (d) The system is located outside the 12 counties bordering Puget Sound; and
  - (e) The geologic conditions beneath the dispersal component must satisfy the minimum unsaturated depth requirements to groundwater as determined by the local health officer. The method for determination is described by "Design Guideline for Gravity Systems In Soil Type 1", (Available upon request to the department).
- (5) The local health officer may increase the loading rate in Table VIII up to a factor of two for Soil types 1-4 and up to a factor of 1.5 for Soil Types 5 & 6 if a product tested to meet

Treatment Level D is used. This reduction may not be combined with any other SSAS size reductions.

- (6) The primary and reserve areas must be sized to at least 100% of the loading rates listed in Table VIII. There are no exceptions to this requirement even if a SSAS size reduction has been permitted.

### **246-272A-0238 Design – Requirements to Facilitate Operation, Monitoring and Maintenance**

(1) The OSS shall be designed to facilitate operation, monitoring and maintenance according to the following criteria:

(a) For gravity systems, septic tank access for maintenance and inspection at finished grade is required. If effluent filters are used, access at finished grade is required.

(b) For all other systems, service access and monitoring ports at finished grade are required for all system components. All accesses shall be designed to allow for observation and maintenance and shall be secured to minimize injury or unauthorized access. Specific component requirements include:

(i) Septic tanks with effluent filters shall have service access manholes and monitoring ports for the inlet and outlet;

(ii) Surge, flow equalization or other sewage tanks shall have service access manholes;

(iii) Other pretreatment units (such as aerobic treatment units and packed-bed filters) shall have service access manholes and monitoring ports;

(iv) Pump chambers, tanks and vaults shall have service access manholes;

(v) Disinfection units shall have service access and be installed to facilitate complete maintenance and cleaning;

(vi) Dispersal systems shall have monitoring ports for both distribution devices and the infiltrative surface.

(c) For systems using pumps, clearly accessible controls and warning devices are required including:

(i) Process controls such as float and pressure activated pump on/off switches, pump-run timers and process flow controls;

(ii) Diagnostic tools including dose cycle counters and hour meters on the sewage stream, or flow meters on either the water supply or sewage stream; and

(iii) Audible and visual alarms designed to alert a resident of a malfunction. The alarm must be placed on a circuit independent of the pump circuit.

### **NEW SECTION**

#### **246-272A-0240 Holding Tank Sewage Systems.**

- (1) Persons shall not install or use holding tank sewage systems for residential development or expansion of residences, whether seasonal or year-round, except as set forth under subsection (2) of this section.

- (2) The local health officer may approve installation of holding tank sewage systems only:
  - (a) For permanent uses limited to controlled, part-time, commercial usage situations, such as, recreational vehicle parks and trailer dump stations;
  - (b) For interim uses limited to handling of emergency situations; or,
  - (c) For repairs as permitted under WAC 246-272A-0280(1)(d)(i).
- (3) A person proposing to use a holding tank sewage system shall:
  - (a) Follow design criteria established by the department;
  - (b) Submit a management program to the local health officer assuring ongoing operation, monitoring and maintenance before the local health officer issues the installation permit; and
  - (c) Use a holding tank reviewed and approved by the department.

## **NEW SECTION**

### **246-272A-0250 Installation.**

- (1) Only approved installers may construct OSS, except as noted under subsection (2) of this section.
- (2) The local health officer may allow the resident owner of a single family residence to install the OSS for that single family residence if the OSS is either located on the same lot as the residence or situated on adjoining property controlled by the owner and legally listed as an encumbrance.
- (3) The installer described by either (1) or (2) of this section shall:
  - (a) Follow the approved design;
  - (b) Have the approved design in possession during installation;
  - (c) Only install septic tanks, pump chambers, and holding tanks approved by the department;
  - (d) Be on the site at all times during the excavation and construction of the OSS;
  - (e) Install the OSS to be watertight, except for the dispersal component;
  - (f) Cover the installation only after the local health officer has given approval to cover; and
  - (g) Back fill with 6 to 24 inches of cover material and grade the site to prevent surface water from accumulating over any component of the OSS;

## **NEW SECTION**

### **246-272A-0260 Inspection**

- Deleted (1)(b)(i) &(iii) because redundant
  - Deleted (1)(d) Notice to title requirement
  - Deleted (2)(b) because redundant to -0238
  - Modified (3)(a) to remove specificity for 1/2 foot accuracy and added a statement of intent
- (1) For all activities requiring a permit, the local health officer shall:
    - (a) Visit the OSS site during the site evaluation, construction, or final construction inspection;
    - (b) Either inspect the OSS before cover or allow the designer of the OSS to perform the inspection before cover if the designer is not also named as installer of the system.

- (c) Keep the construction record drawings on file, with the approved design documents.
- (2) The person responsible for the final construction inspection shall assure the OSS meets the approved design.
- (3) The designer or installer, as directed by the local health officer, upon completion of the new construction, alteration or repair of the OSS shall develop and submit a complete and detailed construction record to both the health officer and the OSS owner that includes at a minimum the following:
  - (a) Measurements or directions to assure the following parts of the OSS can be easily located:
    - (i) All sewage tank openings requiring access;
    - (ii) The ends, and all changes in direction, of installed and found buried pipes and cables;
    - (iii) Any other OSS component which, in the judgment of the health officer or the designer, must be accessed for observation, maintenance, or operation; and
  - (b) Location and dimensions of reserve area;
  - (c) Delineation of where the installation has deviated from the approved design;
  - (d) Initial settings of electrical or mechanical devices that must be known to operate the system in the manner intended by the designer or installer; and,
  - (e) Manufacturer's standard product literature, including performance specifications and maintenance recommendations needed for operation, monitoring, maintenance or repair of the OSS.

## **NEW SECTION**

### **246-272A-0270 Operation, Monitoring and Maintenance- Owner Responsibilities.**

- *(1)(d)(ii) removed local health officer discretion to allow less frequent inspections*
- (1) The OSS owner is responsible for operating, monitoring, and maintaining the OSS to minimize the risk of failure, and to accomplish this purpose, shall:
  - (a) Obtain approval from the local health officer before repairing, altering or expanding an OSS;
  - (b) Obtain and renew contracts for periodic maintenance where required by the local health jurisdiction;
  - (c) Obtain and renew operation permits where required by the local health jurisdiction;
  - (d) Obtain a complete evaluation of the system components and/or property to determine functionality, maintenance needs and compliance with regulations and any permits;
    - (i) At least once every three years for all systems consisting solely of a septic tank and gravity SSAS;
    - (ii) Annually for all other systems unless more frequent inspections are specified by the local health officer.
  - (e) Employ an approved pumper to remove the septage from the tank when the level of solids and scum indicates that removal is necessary;

- (f) Obtain maintenance and needed repairs to promptly return the system to a proper operating condition;
  - (g) Protect the OSS area and the reserve area from:
    - (i) Cover by structures or impervious material;
    - (ii) Surface drainage, and direct drains, such as footing or roof drains. Such drainage must be directed away from the area where the OSS is located;
    - (iii) Soil compaction, for example by vehicular traffic or livestock; and
    - (iv) Damage by soil removal and grade alteration;
  - (h) Keep the flow of sewage to the OSS at or below the approved operating capacity and waste strength;
  - (i) Operate and maintain systems as directed by the local health officer;
  - (j) Request assistance from the local health officer upon occurrence of a system failure or suspected system failure; and,
  - (k) Disclose, in writing to the person to whom the property will transfer, all changes and maintenance to the OSS.
- (2) Persons shall not:
- (a) Use or introduce strong bases, acids or chlorinated organic solvents into an OSS for the purpose of system cleaning.
  - (b) Use a sewage system additive unless it is specifically approved by the department; or
  - (c) Use an OSS to dispose of waste components atypical of sewage from a residential source.

## **NEW SECTION**

### **246-272A- 0275 Operation, Monitoring and Maintenance- Food Service Establishments**

(1) The local health officer shall require annual inspections of OSS serving food service establishments and may require pumping as needed.

### **246-272A-0280 Repair of Failures**

- *Added new (1) (a) determining contributing factors of a failure before making a repair*
- *Combined columns in Table IX for soil types 3-4 and 5-6 to simplify table –no substantive change made*
- *Modified old footnote 2 and created new (5)*
- *Added new footnote 2 to Table IX to account for conforming systems use with setbacks down to 75 feet*
- *Added new (4)(c) to address nitrogen*

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- *Added additional exclusions to the use of disinfection to be consistent with new construction*
- (1) When an OSS failure occurs, the OSS owner shall:
    - (a) Determine the contributing factors of the failure to enable the repair to address identified causes.
    - (b) Repair or replace the OSS with a conforming system or component, or a system meeting the requirements of Table IX either on the:
      - (i) Property served; or
      - (ii) Nearby or adjacent property if easements are obtained; or
    - (c) Connect the residence or facility to a:
      - (i) Publicly owned LOSS;
      - (ii) Privately owned LOSS where it is deemed economically feasible;
      - (iii) Public sewer; or
    - (d) Perform one of the following when requirements in subsections (1)(b) or (1)(c) of this section are not feasible:
      - (i) Use a holding tank; or
      - (ii) Obtain a National Pollution Discharge Elimination System or state discharge permit from the Washington state department of ecology issued to a public entity or jointly to a public entity and the system owner only when the local health officer determines:
        - (A) An OSS is not feasible; and
        - (B) The only realistic method of final dispersal of treated effluent is discharge to the surface of the land or into surface water; or
      - (iii) Abandon the property.
  - (2) Prior to replacing or repairing the effluent dispersal component, the OSS owner shall develop and submit information required under WAC 246-272A-0200(1).
  - (3) The local health officer shall permit a system that meets the requirements of Table IX only if the following are not feasible:
    - (a) Installation of a conforming system or component; and
    - (b) Connection to either an approved LOSS or a public sewer.
  - (4) The person responsible for the design shall locate and design repairs to:
    - (a) Meet the requirements of Table IX if the effluent treatment and dispersal component to be repaired or replaced is closer to any surface water, well, or spring than prescribed by the minimum separation required in Table IV of WAC 246-272A-0210(1). Pressure distribution with timed dosing is required in all cases.

**TABLE IX**  
***Treatment Component Performance Levels for Repair of OSS Not Meeting  
Vertical and Horizontal Separations<sup>1</sup>***

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Vertical Separation (in inches)	Horizontal Separation <sup>2</sup>											
	<25 feet			25<50 feet			50<100 feet <sup>3</sup>			>100 feet		
	Soil Type			Soil Type			Soil Type			Soil Type		
	1	2	3-6	1	2	3-6	1	2	3-6	1	2	3-6
<12	A	A	A	A	A	A	A	A	B	B	B	B
≥ 12 <18	A	A	A	A	B	B	A	B	B	Conforming Systems		
≥18 < 24	A	A	A	A	B	B	A	B	C			
≥24 < 36	A	B	B	B	C	C	B	C	C			
≥36	A	B	B	B	C	C	B	C	E			

<sup>1</sup> The treatment component performance levels correspond with those established for treatment components under the product performance testing requirements in WAC 246-272A-0110.

<sup>2</sup> The horizontal separation indicated in Table IX is the distance between the soil dispersal component and the surface water, well, or spring. If the soil dispersal component is up-gradient of a surface water, well, or spring to be used as a potable water source, or beach where shellfish are harvested, the next higher treatment level shall apply unless Treatment level A is already required;

<sup>3</sup> On a site where there is a horizontal setback of 75 –100 feet between an OSS dispersal component and an individual water well, individual spring, non-marine surface water or surface water that is not a public water source and a vertical separation of greater than 12 inches, a conforming system that complies with WAC 246-272A-0210(4) shall be installed if feasible.

(b) Protect drinking water sources and shellfish harvesting areas;

(c) Minimize nitrogen discharge in areas where nitrogen has been identified as a contaminant of concern in the local plan under WAC 246-272A-0015;

(d) Prevent the direct discharge of sewage to ground water, surface water, or upon the surface of the ground;

(e) Meet the horizontal separations under WAC 246-272A-0210(1) to public drinking water sources;

(f) Meet other requirements of this chapter to the maximum extent permitted by the site; and

(g) Maximize the:

(i) Vertical separation;

(ii) Distance from a well, spring, or suction line; and

(i) Distance to surface water;

(5) If the vertical separation is less than 12 inches, the local health officer may permit a sand consisting of ASTM C-33 sand or coarser to be used as fill to prevent direct discharge of treated effluent to ground water, surface water, or upon the surface of the ground.

(6) Disinfection may not be used to achieve the fecal coliform requirements when meeting:

(a) Treatment Levels A or B where there is less than 18 inches of vertical separation;

(b) Treatment Levels A or B in Type 1 soils; or

(c) Treatment Level C.

(7) The local health officer shall identify repair permits meeting the requirements of Table IX for the purpose of tracking future performance.



- (8) An OSS owner receiving a repair permit for a system meeting the requirements of Table IX from the local health officer shall:
  - (a) Immediately report any failure to the local health officer;
  - (b) Comply with all local and state requirements stipulated on the permit.

## **NEW SECTION**

### **246-272A-0290 Expansions.**

- (1) The local health officer or department shall require an OSS and a reserve area in full compliance with the new system construction standards specified in this chapter for an expansion of a residence or other facility.

## **NEW SECTION**

### **246-272A-0300 Abandonment.**

- (1) Persons permanently abandoning a septic tank, seepage pit, cesspool, or other sewage container shall:
  - (a) Have the septage removed by an approved pumper;
  - (b) Remove or destroy the lid; and
  - (c) Fill the void with soil or gravel.

### **246-272A-0310 Septage Management.**

- (1) An individual shall be approved by the local health officer before removing septage from an OSS.
- (2) Persons removing septage from an OSS shall:
  - (a) Transport septage or sewage only in vehicles clearly identified with the name of the business and approved by the local health officer;
  - (b) Record and report septage removal as required by the local health officer.
  - (c) Dispose of septage, or apply septage biosolids to land only in a manner consistent with applicable laws.

## **NEW SECTION**

### **246-272A- 0320 Developments, Subdivisions, and Minimum land area requirements.**

- (1) A person proposing the development shall obtain approval from the local health officer prior to any development where the use of OSS is proposed.
- (2) The local health officer shall require the following prior to approving any development:
  - (a) Site evaluations as required under WAC 246-272A-0220, excluding subsections (3)(a)(i) and (4)(d);

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- (b) Where a subdivision with individual wells is proposed:
  - (i) Configuration of each lot to allow a 100-foot radius water supply protection zone to fit within the lot lines; or
  - (ii) Establishment of a 100-foot protection zone around each existing and proposed well site;
- (c) Where preliminary approval of a subdivision is requested, provision of at least one soil log per proposed lot, unless the local health officer determines existing soils information allows fewer soil logs;
- (d) Determination of the minimum lot size or minimum land area required for the development using Method I and/or Method II:

**METHOD I.** Table X, Single Family Residence Minimum Lot Size or Minimum Land Area Required Per Unit Volume of Sewage, shows the minimum lot size required per single family residence. For developments other than single family residences, the minimum land areas shown are required for each unit volume of sewage.

**TABLE X**  
**Minimum Land Area Requirement**  
**Single Family Residence or Unit Volume of Sewage**

Type of Water Supply	Soil Type (defined by section -0220 of this chapter)					
	1	2	3	4	5	6
Public	0.5 acre	0.5 acre.	0.5 acre.	0.5 acre	0.5 acre	0.5 acre
	2.5 acre <sup>1</sup>					
Individual, on each lot	1.0 acre	1 acre	1 acre	1 acre	1 acre	1 acre
	2.5 acres <sup>1</sup>					

<sup>1</sup> See WAC 246-272A-0234(4).

**METHOD II.** A minimum land area proposal using Method II is acceptable only when the applicant:

- (A) Justifies the proposal through a written analysis of the:
  - (I) Soil type and depth;
  - (II) Area drainage, and/or lot drainage;

- (III) Public health impact on ground and surface water quality;
  - (IV) Setbacks from property lines, water supplies, etc;
  - (V) Source of domestic water;
  - (VI) Topography, geology, and ground cover;
  - (VII) Climatic conditions;
  - (VIII) Availability of public sewers;
  - (IX) Activity or land use, present, and anticipated;
  - (X) Growth patterns;
  - (XI) Reserve areas for additional subsurface treatment and dispersal;
  - (XII) Anticipated sewage volume;
  - (XIII) Compliance with current planning and zoning requirements;
  - (XIV) Types of proposed systems or designs, including the use of systems designed for removal of nitrogen;
  - (XV) Existing encumbrances, such as listed in WAC 246-272A--0200(1)(c)(v) and WAC 246-272A-0220(a)(vii); and
  - (XVI) Estimated nitrogen loading from OSS effluent to existing ground and surface water;
  - (XVII) Any other information required by the local health officer.
- (B) Shows development with public water supplies having:
- (I) At least 12,500 square feet lot sizes per single family residence;
  - (II) No more than 3.5 unit volumes of sewage per day per acre for developments other than single family residences; and
- (C) Shows development with individual water supplies having at least one acre per unit volume of sewage; and
- (D) Shows land area under surface water is not included in the minimum land area calculation; and
- (e) Regardless of which method is used for determining required minimum lot sizes or minimum land area, submittal to the health officer of information consisting of field data, plans, and reports supporting a conclusion the land area provided is sufficient to:
- (i) Install conforming OSS;
  - (ii) Assure preservation of reserve areas for proposed and existing OSS;
  - (iii) Properly treat and dispose of the sewage; and
  - (iv) Minimize public health effects from the accumulation of contaminants in surface and ground water.
- (3) The department shall develop guidelines for the application of Method II by *(insert date 1 year from the effective date.)*
- (4) The local health officer shall require lot areas of 12,500 square feet or larger except when a person proposes:

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- (a) OSS within the boundaries of a recognized sewer utility having a finalized assessment roll;  
or
- (b) A planned unit development with:
  - (i) A signed, notarized, and recorded deed covenant restricting any development of lots or parcels above the approved density with the density meeting the minimum land area requirements of subsection (2)(d) of this section;
  - (ii) A public entity responsible for operation and maintenance of the OSS, or a single individual owning the OSS;
  - (iii) Management requirements under chapter 246-272B when installing a LOSS; and
  - (iv) Extinguishment of the deed covenant and higher density development allowed only when the development connects to public sewers.
- (5) The local health officer may:
  - (a) Allow inclusion of the area to the centerline of a road or street right-of-way in a Method II determination under subsection WAC 246-272A-0320(2)(d)(ii) to be included in the minimum land area calculation if:
    - (i) The dedicated road or street right-of-ways are along the perimeter of the development;
    - (ii) The road or street right-of-ways are dedicated as part of the proposed development;  
and,
    - (iii) Lots are at least 12,500 square feet in size.
  - (b) Require detailed plot plans and OSS designs prior to final approval of subdivision proposals;
  - (c) Require larger land areas or lot sizes to achieve public health protection;
  - (d) Prohibit development on individual lots within the boundaries of an approved subdivision if the proposed OSS design does not protect public health by meeting requirements of these regulations; and
  - (e) Permit the installation of an OSS, where the minimum land area requirements or lot sizes cannot be met, only when all of the following criteria are met:
    - (i) The lot is registered as a legal lot of record created prior to the effective date of this chapter;
    - (ii) The lot is outside an area identified by the local plan developed under WAC 246-272A-0015 where minimum land area has been listed as a design parameter necessary for public health protection; and
    - (iii) The proposed system meets all requirements of these regulations other than minimum land area.
- (6) The use of a reduced-sized SSAS does not provide for a reduction in the minimum land area requirements established in this section. Site development incorporating reduced sized SSAS must meet the minimum land area requirements established in state and local codes.

## **NEW SECTION**

### **246-272A- 0340 Certification of Installers, Pumpers, and Maintenance Service Providers**

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- (1) OSS installers and pumpers shall obtain approval from the local health officer prior to providing services within a local health jurisdiction.
- (2) Local health officer may establish programs and requirements for approving maintenance service providers.

**246-272A- 0400 Technical Advisory Committee.**

*Added (2) allowing DOH to have a representative*

- (1) The department shall:
  - (a) Maintain a technical advisory committee to advise the department regarding:
    - (i) OSS design and siting;
    - (ii) Public domain technologies and Recommended Standards and Guidance for their use; and
    - (iii) Testing and design standards used for proprietary product registration and Recommended Standards and Guidance for use of proprietary products.
  - (b) Select members for the technical advisory committee with technical or scientific knowledge applicable to OSS from agencies, professions, and organizations including:
    - (i) Local health departments;
    - (ii) Engineering firms;
    - (iii) The department of ecology;
    - (iv) Land sales, development and building industries;
    - (v) Public sewer utilities;
    - (vi) On-site sewage system design and installation firms;
    - (vii) Environmental organizations;
    - (viii) University/college academic communities;
    - (ix) On-site sewage system or related product manufacturers; and
    - (x) Other interested organizations or groups.
  - (c) Convene meetings as needed.
- (2) The department may have a representative on the technical advisory committee.

**246-272A-0410 Policy Advisory Committee.**

*Added (2) allowing DOH to have a representative*

- (1) The department shall:
  - (a) Maintain a policy advisory committee to:
    - (i) Make recommendations concerning departmental policy and regulations;
    - (ii) Review program services; and
    - (iii) Provide input to the department regarding the onsite sewage program;
  - (b) Select members from agencies, professions, organizations having knowledge and interest in OSS, and groups which are affected by the regulations; and

(c) Convene meetings as needed.

(2) The department may have a representative on the policy advisory committee.

## NEW SECTION

### **246-272A-0420 Waiver of State Regulations.**

- Deleted (1) because this chapter only applies to OSS up to 3500 gallons per day
  - Added (2) to reflect need for DOH guidance.
- (1) The local health officer may grant a waiver from specific requirements of this chapter if:
- (a) The waiver request is evaluated by the local health officer on an individual, site-by-site basis;
  - (b) The local health officer determines that the waiver is consistent with the standards in, and the intent of, these rules; and
  - (c) The local health officer submits quarterly reports to the department regarding any waivers approved or denied.
  - (d) Based on review of the quarterly reports, if the department finds that the waivers previously granted have not been consistent with the standards in, and the intent of these rules, the department shall provide technical assistance to the local health officer to correct the inconsistency, and may notify the local and state boards of health of the department's concerns. If upon further review of the quarterly reports, the department finds that the inconsistency between the waivers granted and the state board of health standards has not been corrected the department may suspend the authority of the local health officer to grant waivers under this section until such inconsistencies have been corrected.
- (2) The department shall write guidance to assist local health officers in the application of waivers.

## NEW SECTION

### **246-272A-0425 – Required rule review**

*New section added*

The department shall review this chapter to evaluate the effectiveness of the rules and determine areas where revisions may be necessary. The department will provide the results of their review along with their recommendations to the state board of health by *(insert a date four years after the effective date of the rules.)* and every four years thereafter.

## NEW SECTION

### **246-272A-0430 Enforcement.**

- (1) The department or the local health officer:
- (a) Shall enforce the rules of chapter 246-272A WAC; or

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- (b) May refer cases within their jurisdiction to the local prosecutor's office or office of the attorney general, as appropriate.
- (2) When a person violates the provisions under this chapter, the department, local health officer, local prosecutor's office, or office of the attorney general may initiate enforcement or disciplinary actions, or any other legal proceeding authorized by law, including but not limited to any one or a combination of the following:
  - (a) Informal administrative conferences, convened at the request of the department or owner, to explore facts and resolve problems;
  - (b) Orders directed to the owner and/or operator of the OSS and/or person causing or responsible for the violation of the rules of chapter 246-272A WAC;
  - (c) Denial, suspension, modification, or revocation of permits, approvals, registrations, or certification; and
  - (d) The penalties under chapter 70.05 RCW and 43.70.190;
  - (e) Civil or criminal action.
- (3) Orders authorized under this section include the following:
  - (a) Orders requiring corrective measures necessary to effect compliance with chapter 246-272A WAC which may include a compliance schedule; and
  - (b) Orders to stop work and/or refrain from using any OSS or portion of the OSS or improvements to the OSS until all permits, certifications, and approvals required by rule or statute are obtained.
- (4) Enforcement orders issued under this section shall:
  - (a) Be in writing;
  - (b) Name the person or persons to whom the order is directed;
  - (c) Briefly describe each action or inaction constituting a violation of the rules of chapter 246-272A WAC, or applicable local code;
  - (d) Specify any required corrective action, if applicable;
  - (e) Specify the effective date of the order, with time or times of compliance;
  - (f) Provide notice of the consequences of failure to comply or repeated violation, as appropriate. Such notices may include a statement that continued or repeated violation may subject the violator to:
    - (i) Denial, suspension, or revocation of a permit approval, or certification; and/or
    - (ii) Referral to the office of the county prosecutor or attorney general.
    - (iii) Other appropriate remedies.
  - (g) Provide the name, business address, and phone number of an appropriate staff person who may be contacted regarding an order.
  - (h) Comply with chapter 43.70 RCW and chapter 34.05 RCW if issued by the department.
- (5) Enforcement orders shall be personally served in the manner of service of a summons in a civil action or in a manner showing proof of receipt.
- (6) The department shall have cause to deny the application or reapplication for an operational permit or to revoke, suspend, or modify a required operational permit of any person who has:

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- (a) Failed or refused to comply with the provisions of chapter 246-272A WAC, or any other statutory provision or rule regulating the operation of an OSS; or
  - (b) Obtained or attempted to obtain a permit or any other required certificate or approval by misrepresentation.
- (7) For the purposes of subsection (6) of this section and WAC 246-272-0440, a person is defined to include:
- (a) Applicant;
  - (b) Re-applicant;
  - (c) Permit holder; or
  - (d) Any individual associated with subsection 7 (a), (b) or (c) or this section including, but not limited to:
    - (i) Board members;
    - (ii) Officers;
    - (iii) Managers;
    - (iv) Partners;
    - (v) Association members;
    - (vi) Agents; and in addition
    - (vii) Third persons acting with the knowledge of such persons.

**246-272A-0440 Notice of decision -- Adjudicative Proceeding**

- (1) All local boards of health shall:
  - (a) Maintain an administrative appeals process to consider procedural and technical conflicts arising from the administration of local regulations; and
  - (b) Establish rules for conducting hearings requested to contest a local health officer's actions.
- (2) The department shall provide notice of a denial, suspension, modification or revocation of a permit, certification, or approval consistent with chapter 43.70.115 RCW, chapter 34.05 RCW, and chapter 246-10 WAC.
- (3) A person contesting a departmental decision regarding a permit, certificate, approval, or fine may file a written request for an adjudicative proceeding consistent with chapter 246-10 WAC.
- (4) Department actions are governed under the Administrative Procedure Act chapter 34.05 RCW, chapter 43.70.115 RCW, this chapter, and chapter 246-10 WAC.

**NEW SECTION**

**246-272A-0450 Severability**



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- (1) If any provision of this chapter or its application to any person or circumstances is held invalid, the remainder of this chapter, or the application of the provision to other persons or circumstances shall not be affected.

**NEW SECTION**

**Fees**

**246-272A-990**

*Fees will be set by DOH in a separate rule making.*